

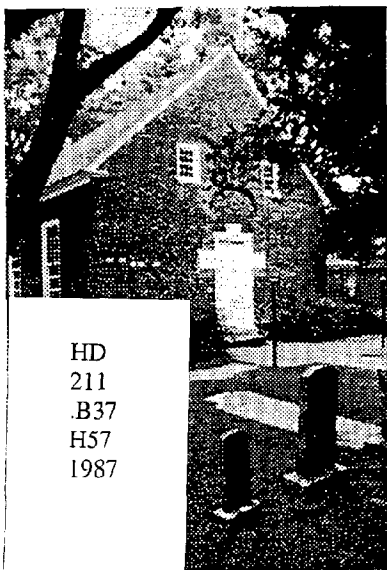
BATH



Historic
Bath
North Carolina



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LAND USE PLAN

1986 - 1996

Adopted by the Town Commission: March 16, 1987
Certified by Coastal Resources Commission: March 27, 1987

Terry W. Alford
PLANNING & DESIGN ASSOCIATES, P.A.

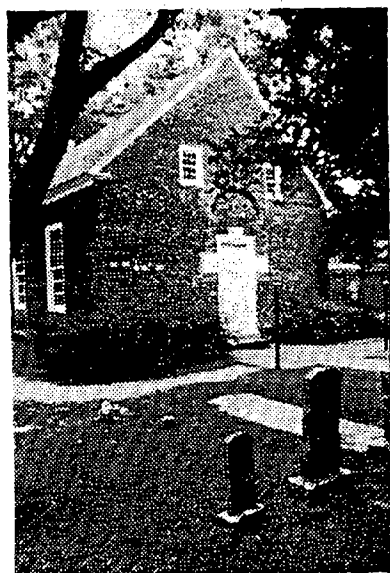
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NOAA Coastal Services Center Library
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Charleston, SC 29405-2413**

Land Use Plan of Historic Bath: 1986 - 1996

Bath, North Carolina

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The Land Use Plan of Historic Bath: 1986 - 1996

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Disk: Bath LUP
File: Contents

BATH LAND USE PLAN, 1986-1996

EXECUTIVE SUMMARY

I. Purpose of a Land Use Plan

- A. Local Government Purposes: To provide the Town of Bath and its extraterritorial planning jurisdiction with a guide for orderly and desirable growth.
- B. Regional Uses: Regional councils of government on planning and regional development commissions use the land use plan not only as a basis for their regional plans but to disperse state and federal funding programs as well.
- C. State and Federal Government: Local land use plans are used as one major criterion in the granting or denial of permits for various developments within the coastal area.

II. Description of Present Conditions

A. Population:

- 1. The 1986 population of Bath is estimated to be 267 people.
- 2. The elderly population has increased from 21% of the total population in 1970 to 42.8% in 1980.

B. Economy and Housing:

1. The largest contributor to Bath's economy is tourism.
2. The largest employer in Bath is Bath High School.
3. The housing stock is predominantly single family detached units.

C. Existing Land Use:

1. Agriculture and forestland are the largest land use activity.
2. Residential activity consists of year-round residents, as well as second-home residents.
3. There is no distinct commercial district in the planning area. Commercial areas of concern are related to water, tourists, and services.
4. The historic importance of Bath much like its other natural resources must be protected.
5. Two areas of environmental concern are Coastal Wetlands (salt marshes) and Public Trust Waters (all navigable waters).

D. Issues concerning existing land uses are:

1. There are three places in the community where commercial development rests in areas that have flooded in the past.

2. Residential development is very close to the Coastal Wetlands Area of Environmental Concern.
3. Residential and business development occurs in areas with particularly shallow soils and poor drainage.
4. Agricultural land use could be more appropriately used for community and economic development.

E. Constraints: Land Suitability:

1. Hazard Areas. The major natural hazards are flood-prone areas and points of excessive erosion.
2. Soil Limitation Areas. The entire area may be classified as one in which soil limitations are common to most of the soils present. The soil limitations include hazards for foundations, shallow soils, poorly drained soils, and areas with limitations for septic tanks.
3. Water Supply. The water source is derived from ground water supplies (Castle Hayne Aquifer).
4. Areas where Predominant Slope Exceeds 12%. Areas of greater than 12% slope occur on the partially eroded shoreline of the creeks.
5. Fragile Areas. The most vulnerable areas of Bath are the AEC's, properties on the state registry of historic places, and archeological sites.
6. Areas with Resource Potential. The Bath Planning Area is productive for agricultural lands.

F. Capacity of Community Facilities and Future Demand:

1. Water Services. The aeration building is in need of repair and other maintenance. Currently, the water system is operating at 14% of designed capacity.

2. Wastewater System. The construction of the new wastewater system is expected to be complete by December 1986. When all facilities are hooked-up, the wastewater system will be operating at 76% of designed capacity. By 1995 it is projected that the wastewater system will be operating at 100% of designed capacity.
3. Roads. There are several unpaved roads in Bath's planning area. The importance of unpaved roads is their development potential and the cost of their maintenance.
4. School. Bath High School has a capacity of 950 students.

III. Policy Discussion and Implementation Strategy

A. The citizens of Bath and it's planning and jurisdiction rated the following issues as the most serious facing them:

1. Pollution of creeks/rivers from farmland water runoff.
2. Phosphate mining operations along and within the Pamlico river.
3. Pollution of creeks and rivers from industry.
4. Protection of cultural historical areas.
5. Protection of commercial fishing industry.

B. The Planning Board and the 1986 Bath Household Survey indicate that:

1. Residential and small business development occur within the town boundaries.
2. The agriculture and fishing industries are the industries the town intends to promote.

3. The town should make it a policy that all development requiring expansion of community services will be the financial responsibility of the developer.
4. The town should discourage private marinas, water access for sailboats only and subdivision development wherein the Town provides all facilities.

C. In light of (a) the environmental constraints to development, (b) the present capacity of community facilities, and (c) the 1986 Bath Household Survey the following Policy Objectives were created. (These Objectives are presented in 5 categories.)

1. Resource Protection Policy Objectives:

- (a) Protect water quality of both Bath and Back Creek.
- (b) Protect areas of environmental concern (environmentally sensitive lands).
- (c) Protect agricultural lands located in areas designated as Rural or Conservation on 1986 Land Classification Map.
- (d) Protect cultural/historical resources.
- (e) Protect potable water supply.
- (f) Investigate and implement available erosion prevention measures.

2. Resource Production and Management Policy Objectives:

- (a) Protect and Promote the commercial fishing industry.
- (b) Protect agricultural lands located in areas designated as rural or conservation on 1986 Land Classification Map.

(c) Discourage phosphate mining operations within the Town's planning jurisdiction.

(d) Engage in the removal of all man-made hazards.

(e) Investigate and implement available erosion prevention measures.

(f) Establish Bath Pier Development Project.

3. Economic and Community Development Policy Objectives:

(a) Support expansion of existing industry and recruitment of new industry. Preserve the community based school as a working, viable facility.

(b) Maintain and enhance the availability of adequate housing for elderly and low-income persons.

(c) Promote tourism and recreational industry development. Protect Bath's cultural/historical resources.

(d) Establish Bath Pier Development Project.

(e) Prevent private, commercial marina development.

(f) Provide a location for potential energy facility sitings, as opportunities present themselves.

4. Storm Hazard Mitigation Policy Objectives:

(a) Protect areas of environmental concern and environmentally sensitive lands.

(b) Maintain and/or strengthen existing policies known to decrease the risk of hurricane damage.

(c) Increase public awareness of hurricane preparation.

In the event of a storm...

(d) Prioritize all clean-up efforts.

(e) Create "Recovery Task Force".

(f) Coordinate all efforts with necessary County, State, and Federal agencies.

5. Continuing Public Participation Policy Objectives:

(a) Encourage participation in land use discussions by all sectors of the population.

(b) Educate Bath residents about issues regarding resource protection and production, community development.

IV. Storm Hazard Mitigation

A. The purpose of a storm mitigation plan is to save lives, save capital investments, and save irreplaceable natural resources. The areas most vulnerable to major storms are (ranked by severity): coastal wetlands, public trust waters, flood prone areas, and the rest of the community.

B. The Town of Bath has approximately \$3.28 million worth of buildings at risk.

C. Most of the Town of Bath is threatened in storms with winds of 111 miles per hour or more.

- D. The Town of Bath has good evacuability; therefore, the Town has ample room for safe growth.
- E. Bath High School is the evacuation shelter for the Town of Bath.
- F. The Town of Bath is responsible for reporting all of its activities regarding storm hazard mitigation and hurricane preparedness with various state and federal agencies.

V. **Land Classification System**

- A. The purpose of the land classification map is to illustrate the Town's policy statements provided in this land use plan. It is not a strict regulatory mechanism but a guideline for Bath's official Growth Policy. The Land Classification Map includes four categories:

- (1) Developed: Mixed use, high density area comprising the Town of Bath. Small business development and residential infill are encouraged in this area. The existing developed area can accomodate expected growth to the year 2000.
- (2) Transition: Areas that are currently being developed or areas that will require community services in the future. The Transition subcategories (Mixed, Residential, and Industrial) ensure that any future development in these areas will be appropriate to the site and in accordance with the Policy Objectives identified in this Land Use Plan.
- (3) Rural: Very low density residential, commercial, or agricultural uses.
- (4) Conservation: AEC's and flood prone areas. Development may occur, if it does not impair the biological, cultural, economic, and aesthetic value of the area.

VI. Analysis of Policy Achievements Since 1981

A. Resource Protection:

- (1) "Planned Variations of the Proposed Wastewater System" Report completed.
- (2) Wastewater Treatment System for the Town was developed and is presently under construction.
- (3) Program of voluntary removal of pilings in Bath and Back Creeks.
- (4) Continued protection of Bath Historic District by the Bath Historic District Commission.

B. Resource Production and Management

- (1) Continued protection of the water quality of Bath and Back Creeks by the development of a wastewater system and prohibition of marina development.

C. Economic and Community Development

- (1) Achieved levels, types, and patterns of economic growth consistent with the historic nature of the Town by prohibiting the development of an additional marina.
- (2) Developed the Town's capacity to provide services to development mindful of impacts upon taxes and developers costs by developing the wastewater system.
- (3) Encouraged the development of the economic base, by allowing the construction of a new restaurant.

D. Continuing Public Participation

- (1) Achieved meaningful public participation in land-use matters by engaging approximately 60% of the public in the 1986 Bath Household Survey.

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I. The Importance of Planning

A. What is a Land Use Plan?

A Land Use Plan is a collection of policy statements which serve as guidelines for local, state, and federal officials when making decisions affecting development. It is also intended to be used by private individuals when they make decisions regarding development.

The Coastal Area Management Act of 1974 requires all local governments in Coastal North Carolina Counties and municipalities to develop a land use plan. The plan is to assure the orderly growth of North Carolina's coastal area and to protect important natural resources.

The land use plan is to be developed to serve the Town of Bath for a period of 10 years. It is required however, by CAMA, that the plan be updated every five years.

B. How is a Land Use Plan Utilized?

Land use plans which are prepared by local governments in the coastal area are distributed widely, and have many uses. Those reviewing and using the plans are local governments, regional councils of government, state, and federal permitting agencies and public and private funding and development groups.

The discussion of policies, the land classification map, and the relationship between the two serve as the basic tools for coordinating policies, standards, regulations, and other government activities at the local, state, and federal levels. This coordination is described by three applications:

- (a) The policy discussion and the land classification map encourage

coordination and consistency between local land use policies and the state and federal governments. The local land use plans are the principal policy guides for governmental decisions and activities which affect land uses in the coastal area.

- (b) The local land use plans provide a framework for budgeting, planning, and for the provision and expansion of community facilities such as water and sewer systems, schools and roads.
- (c) The local land use plans will aid in better coordination of regulatory policies and decision by describing local land use policies and designating specific areas for certain types of activities, thus directing other city tools such as zoning and subdivision ordinances.

Local Government Uses - Counties and municipalities should use the local land use plans in their day-to-day decision making and in planning for the future. The land use plans should provide guidance in local policy decisions relating to overall community development. The plans also provide the basis for development regulations and capital facility planning and budgeting. By identifying how the community prefers to grow, land use plans help to assure the best use of tax dollars for extension of public utilities and services to areas designated for development.

Regional Uses - The regional councils of government on planning and regional development commissions use the local land use plans as the basis for their regional plans and in their function as regional clearinghouse (A-95) for state and federal funding programs. The local plans indicate to these regional agencies what types of development the

local community feels are important and where the development should take place.

State and Federal Government Uses - Local land use plans are used as one major criterion in the granting or denial of permits for various developments within the coastal area. State and federal agencies must be sure that their decisions consider the policies and land classification system which are described by the local governments in their plans. The Coastal Area Management Act stipulates that no development permit may be issued if the development is inconsistent with the local land use plans. Similarly, decisions relating to the use of federal or state funds within coastal counties, and towns and projects being undertaken by state and federal agencies themselves must also be consistent with the local plans. State agencies also use the plans in their A-95 review. It is thus vitally important that local governments take the opportunity to be as definitive as possible in developing their policy statements and land classification system to minimize interpretive decisions on the part of state and federal review, permit, and funding agencies.

C. Why Plan for Bath's Future?

The Town of Bath, incorporated in 1705, is the oldest town in North Carolina, located at the confluence of Bath Creek and Back Creek in central Beaufort County.

Bath has played an important role since English colonists first began to settle North Carolina. The harbor served as the port of entry for most of the state and it attracted a variety of historical figures, from the first General Assembly to the notorious pirate Blackbeard.

That scenic setting at the juncture of the creeks and the historic heritage of the Town still make Bath a pleasant year round home for 238 people (7/84 estimated NC census counts), and it lies at the center of a 71,403 acre township which holds another 3300 people. The natural beauty and good recreational and commercial fishing attract others to Bath on a seasonal basis and provide an opportunity for growth in this small farming community.

The purpose of this Land Use Plan is to provide the Town of Bath and its extraterritorial zoning jurisdiction a guide for orderly and desirable growth. While it is important that the Citizens of Bath be protected in advance from the adverse effects of phosphate mining and other types of development, it is not the intent of this Plan to discourage development that is consistent with the land use plan. Moreover, it is the objective of this plan to guide development in and within extraterritorial of Bath so that the end result will be a product of orderly planning with all new development 'fitting in' with the environment. In fact, it is recognized that good development should be encouraged as a means of insuring the economic health of the community.

Because of its role in history and its function in today's tourist/recreational economy, the Town of Bath has double incentive to plan seriously for its future. The Town Board of Commissioners, through its Planning Board, has been about such work for many years. Already in place are impressive community planning elements such as the 1977 Land Development Plan, its companion Zoning Ordinance (1979) which includes a Historic District Ordinance and the 1981 Land Use Plan prepared under the NC Coastal Area Management Act. The Town has established and zoned a one-mile planning jurisdiction, which also serves as the planning area for this document.

The Town realizes that if it is to provide for its present and future citizens, Bath must systematically tackle some increasingly complicated problems, including:

- How to promote more farming, attract light industry and stimulate business and local employment.
- How to continue improving the water system and treat wastewater to provide better service to townspeople and future development.
- How to guide and encourage development of permanent and second homes and other recreational projects in the area without harming the Town's natural and historic character.
- How to maintain water quality with the increasing development pressures.

It is in wake of these challenges that the Town Board offers this 1986 CAMA Land Use Plan.

The citizens and staff of the Town of Bath, with consultant assistance provided by Planning and Design Associates, P.A. (PDA), have prepared the 1986 Bath Land Use Plan Update. The plan is divided into seven sections and an appendix. The different sections include: **Executive Summary, I. The Importance of Planning, II. Description of Present Conditions, III. Policy Discussion and Implementation Strategies, IV. Storm Hazard Mitigation, V. Land Classification System, and VI. Analysis of Policy Achievements since 1981.**

The following is a brief overview of each section:

The **II. Description of Present Conditions** outlines the demographic and economic aspects of Bath and provides an existing land use map. This section summarized current plans, policies, and regulations reviewed during the Plan update process, discusses existing constraints to Bath's development, provides estimates of future growth in Bath, and provides estimates of future community facilities demand that will accompany the project growth.

The section on **III. Policy Discussion and Implementation Strategies** is organized into categories of resource protection, resource production, economic and community development, public participation, and storm hazard mitigation. This section also discusses the increasingly important role of intergovernmental coordination in regard to those policy statements.

The **IV. Storm Hazard Mitigation** section identifies what the Town of Bath has to lose in the event of a storm, how the Town should best minimize its potential losses, and how the Town should reconstruct in the event of a storm.

Another section of this plan presents the **V. Land Classification System** and discusses the criteria used to determine the classification of the Bath Planning Area as well as the intergovernmental coordination and cooperation necessary for successful utilization of this land classification system.

The final section of this plan, **VI. Analysis of Policy Achievements since 1981**, discusses the progress the Town of Bath has made in achieving its most recent policy goals.

II. Description of Present Conditions

A. Establishment of Information Base

Data for the 1986 Bath Land Use Plan Update was collected through a combined effort of the Town of Bath Planning Board and Planning & Design Associates, P.A. (PDA).

The data assembly began with assessments of the 1981 Bath Land Use Plan and other public policy documents, technical plans and studies, and published information on the Town. A bibliography of literature reviewed is contained in Appendix I.

Published data were collected from local, county, state, and federal agencies as needed. These included consultant collection of data via visits with the NC Office of State Budget and Management, NC Office of the U.S. Geological Survey, NC State Archives, NC Department of Transportation, NC Division of Environmental Management, NC Department of Natural Resources and Community Development, and the UNC-Chapel Hill Department of City and Regional Planning Library.

Communication was maintained with the NRCD regional office in Washington, NC and the Town of Bath's Administrator, M. Edward (Bubs) Carson.

Information regarding location of Areas of Environmental Concern, and general field data on all policy issues outlined in this plan were collected through field surveys (windshield and on foot) by PDA.

PDA also made extensive use of previously adopted land use plans and other technical material regarding Bath which it had in-house. This material includes aerial photographs, soil survey maps, and all documents listed in Appendix H, page 106.

B. Population, Economy, and Housing

Population

The table below reflects the Town's population by age and sex as of 1980:

Town of Bath, NC
Population by Age and Sex
1980

<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Total and % of Total Population</u>	
0-5	4	2	6	(2.8%)
5-14	6	11	17	(8.0%)
15-24	12	9	21	(9.6%)
25-34	9	8	17	(8.0%)
35-44	9	3	12	(5.6%)
45-54	4	8	12	(5.7%)
55-64	18	19	37	(17.5%)
65-over	<u>27</u>	<u>64</u>	<u>91</u>	<u>(42.8%)</u>
Total	89	124	213	(100.0%)

(Source: U.S. Bureau of Census, Census of Population and Housing, 1980.)

The elderly population of the Town of Bath has increased tremendously. According to data contained in previous land use plans, in 1970 the population of persons 65 years or older totalled 49 persons and comprised 21% of the total population. In 10 years that population group has nearly doubled in size and has doubled its proportion to total population.

Economy and Housing

Bath is principally a residential community whose residents commute to work. Washington and Belhaven are close by and most of the Town's residents are employed there. The commercial activities in the Town of Bath include: one general merchandise store, a service station, an automobile repair shop, a bank, a marina/convenience store, State Historic Site, including a visitor

center and restored buildings, a restaurant, a motel, a bed and breakfast, an ABC store, and several gift shops.

The largest employer in Town is the Bath High School, employing 70 people. The Town may lose some of this workforce should the county's present plan for consolidation reduce the student population at this site. In November 1986 Beaufort county residents will be voting on a bond issue that will include whether or not to consolidate grades 10-12 currently at Bath High School into other local schools nearby. Should this pass, Bath High School will be losing students and employees within 3-5 years.

Perhaps the largest contributor to Bath's economy is the tourist industry. Tourists are attracted to Bath's historic sites and the Blackbeard Outdoor Drama Amphitheater.

Housing in Bath is primarily single-family detached. In 1980 there were 118 housing units, 90 of which were occupied year round. Of the 28 remaining houses not occupied year round, 15 were held for occasional use. The average household size (of year round occupied) was 2.4 persons.

1986 Estimates

The 1980 Bath Land Use Plan showed that Bath's population had been steadily declining over several decades. It appears, according to July 1984 population estimates provided by the NC Office of State Budget and Management, that this trend is reversing itself.

This latest estimate shows Bath as having a 7/84 population of 238 persons -- an approximate 3.75% annual growth rate (seasonal population statistic are unavailable). Much of this population growth can be attributed to the housing development occurring in the northern and eastern sections of the Town's Extraterritorial Planning Jurisdiction. Annexation of the eastern

portion of the Planning Area (Springdale Village see Map A, page 84) is expected to occur in the near future. This area will be served by the new wastewater system. Development in the Town is much more attractive now, with construction of a wastewater system scheduled to be completed by December 1986.

Assuming the 3.75% annual growth rate has continued since 1984, 1986 population and housing projections for 1986 are:

- 267 persons within Town limits
- 113 occupied housing units with an average household size of 2.4 persons

C. Existing Land Use Analysis

Land use activities in Bath have not significantly changed during the past six years. Land use activities within the Bath Planning Area are devoted to the following uses: Agricultural and Forestland, Residential, Commercial, and Cultural and Institutional. All areas with these uses are identified in Map A: Existing Land Use (page 84).

Agricultural and Forestland

The largest land use activity within the planning district is devoted toward agricultural production and forestry. The area immediately north of Town is oriented toward agricultural production. The major crops include corn and soybeans. A majority of land area east of Town, across Back Creek, is undeveloped and forested. The land west of Bath, across Bath Creek, is also undeveloped, but agricultural production is more extensive.

These two land use activities have few implications upon adjacent land uses. They are, however, affected by activities or land use trends which

occur nearby. This sensitivity to adjacent activities makes agriculture and forestry lands vulnerable to development pressures. This is particularly true for agricultural lands which are cleared, have suitable soils and are well drained. Thus, there is a potential for increasing pressure upon agricultural land when development of an area is initiated. The greatest conflict which may arise is between the need for agricultural products and the need for land for development purposes.

Residential

Residential land use is divided between two types of activity; year-round housing and second home development. The majority of the year-round housing units are located within the Town limits although the Existing Land Use Map reflects residential concentration along NC 92 east of town and along King Street Extension at the intersection of S.R. 1743. A new subdivision (Springdate Village see Map A, page 84) has been developed on S.R. 1763 immediately east of the corporate limits. This subdivision represents the majority of new residential development in the area. The remaining year-round dwelling units are much older.

The second aspect of the Town's residential activity is associated with second home development. Second home development is directed at areas in close proximity to the waters of Bath Creek and Back Creek. At the present time, there are several areas which are experiencing second home development. They are as follows: 1) outside the corporate limits of Bath on the east side of Back Creek, there are several existing units with a potential for more; 2) further along the same side of the creek, past the confluence with Bath Creek; this development is more extensive than first mentioned. Access to this development is provided from NC 92 on an unimproved road, S.R. 1757;

3) the most extensive second home development is located on the west side of Bath Creek at the termination of S.R. 1340. This area includes approximately sixteen (16) units; and four (4) within the corporate limits of Bath. One area, more than any other, is predominately second home oriented. That area is located along East Front Street and Back Creek Drive. In total, there are approximately ten (10) dwelling units. It should be noted that each area has many year-round residents.

Commercial

Within the planning area, there is not a distinct commercial district. There are, however, three areas of commercial concern which are water, tourists, and services related.

The water-related commercial activity is focused upon the sailboat marina which is located on the east side of Bath Creek, immediately south of NC 92. The marina has a capacity for approximately thirty (30) boats. In addition to the marina, a new commercial activity oriented toward sailboat repair has recently been established on Back Creek as well. A private boat ramp is located at the southwest side of Back Creek Bridge and northeast side of Bath Creek Bridge which provides access for a nominal fee.

The historic significance of the Town brings many tourists to Town during the summer months. The annual production of the outdoor drama Blackbeard, Knight of the Black Flag at the Blackbeard Amphitheater also brings in many tourists. There are several shops which are open and cater to these tourists.

The final level of commercial activity relates to the provision of goods and services which are required for day to day living. These activities include a service station, a grocery store, a bank and post office, a

restaurant, and an ABC store. The extent of these activities is limited and at this time does not have a negative impact upon adjacent land uses.

Cultural and Institutional

The historic importance of Bath is recognized by both the local residents as well as individuals versed in the history of North Carolina. The historical importance of Bath is being preserved and perpetuated by the Historic Bath Commission, the North Carolina Department of Cultural Resources, and the Historic District Commission. Map C - Inventory of Historic Properties (page 86) shows the Town's inventory of historically significant structures.

In many respects, the historic places and atmosphere which characterize Bath are like a natural resource, when they no longer exist or are compromised by undesirable development they are lost forever and cannot be replaced. The year-round residents of Bath place a high value upon the preservation of this historic importance of Bath. More directly, many town residents express concern about development which may or could occur within town, which would have the effect of negating the historic atmosphere.

In addition to the historic properties, there is a large block of land on the south side of NC 92, immediately east of Bath High School, which is owned by the Beaufort County Board of Education. The utilization of that property, according to the Board, is for a future educational complex which is to be developed for students in the eastern portion of the county. Plans for development of this tract have not been completed and are not currently being pursued.

Map B - Community Facilities Map (page 85) identifies the Bath wastewater treatment facility site.

Areas of Environmental Concern (AECs)

Two types of AECs are found within the Bath Planning Area: Coastal Wetlands and Public Trust Waters. These areas are shown on Map D - Fragile Areas Map (page 87).

The designation and regulation of critical resource areas is one of the major purposes of the Coastal Area Management Act. The 1974 Legislature found that "the coastal area, and in particular the estuaries, are among the most biologically productive regions of this state and of the nation," and in recent years the area "has been subjected to increasing pressures which are the result of the often conflicting needs of the society expanding in industrial development, in population, and in the recreational aspirations of its citizens." The Act further states that, "unless these pressures are controlled by coordinated management, the very features of the coast which make it economically, aesthetically, and ecologically rich will be destroyed.

Through a subsequent nomination process, interim areas of environmental concern (IAECs) were reviewed by the Coastal Resources Commission and 13 categories of AECs were proposed for final designation. These are explained in detail in 15 NCAC 7H.

Coastal Wetlands in Bath consist of salt marshes which "are subject to regular or occasional flooding by tides, including wind tides . . ." Like other wetlands, they support the unique productivity of the estuarine system through entrapping decayed plant material and other nutrients. Without the marsh, the high productivity levels and complex food chains typically found in the estuaries could not be maintained. Such are essential for estuarine dependent species of fish and shell fish and waterfowl and other wildlife

feeding and nesting.

Currently, protection of the marshes has been achieved through stringent monitoring of bulk-heading and enforcement of permit authority by the CAMA permit officer. This level of concern should be maintained in the future.

The second type of AEC in the Bath planning area is public trust waters. As encompassed in Section .0207 of 15 NCAC 7H, public trust waters in Bath essentially means all navigable waters, that is, all the waters of Bath and Back Creek. Such waters are important to the Town, as well as to the CRC, because the public has access rights and use rights of these areas for navigation, recreation, and commerce. Additionally, these waters have aesthetic value and are commercially important resources for economic development.

The extensive use of the public trust waters for recreation, plus the effective regulation of permitted uses around the marshes led the Planning board to recommend policies which support the tourist trade and promote the area outside the Town as a choice site for second or recreational homes. The Board chose policies which stimulate desirable uses rather than stifles development altogether.

Conclusions

Currently there are no major problems from unplanned development. Potential problems regarding mobile home development are addressed in the Zoning Ordinance. Potential problems regarding floating home development, energy-facility siting, developing beyond wastewater system capacity are addressed in this document.

Comparison of the Existing Land Use Map (page 84) with the Fragile Areas Map (page 87), Storm Hazards Map (page 89), and the Flood Prone Areas Map (page 90); renders the following conclusions:

There are currently three places in the community, all are the intersections of the Bath Creek and Back Creek Bridges with the peninsula where commercial development rests in areas which have been flooded in the past. Examination of the flood-prone areas map shows that these areas, as well as a considerable amount of shoreline from Handys Point to the Back Creek Bridge are subject to flooding.

Residential development is very close to the coastal wetlands AEC, which, while being natural for a waterfront community, stimulates additional concern for those wishing to build bulkheads. Careful monitoring by the Division of Coastal Management is currently protecting those areas.

Residential and business development occurs in areas with particularly shallow soils and poor drainage, as shown in Section B II above.

Agricultural land use within the Town limits are currently using space which could be more appropriately used for community and economic development. Taxed at lower rates, the current uses are incompatible with the long-range development goals of the community.

If development goes as planned (see the discussion on Land Classification, page 71), the areas north and east of the Town limits are likely to change. Before these areas change however, it is hoped that vacant land and agricultural land within the Town limits will develop first.

D. Current Plans, Policies, and Regulations

A list of plans which pertain to the Bath Planning Area is contained in Appendix H (page 111). The Bath Zoning Ordinance is an important planning document used by the Town to control land use.

A list of state and federal regulations pertaining to development within the Bath Planning Area is contained in Appendix I (page 112).

E. Constraints: Land Suitability

In accordance with CAMA regulations, the following is a brief analysis of

the general suitability of the undeveloped land in the Bath Planning Area.

The analysis presented here, plus related sections of policy discussion were the basis for the design of Map I - Land Classification Map (page 92).

Land suitability is analyzed in terms of three different types of constraints:

Physical Limitations, Fragile Areas, and Areas of Resource Potential.

Physical Limitations

Hazard Areas

As shown on Map F - Hazard Areas (page 89) and Map G - Flood Prone Areas (page 90), the major natural hazards in the Bath Planning Area are flood prone areas and points of excessive erosion. Development should be directed away from those areas or undertaken with caution.

Areas with Soil Limitations

These include hazards for foundations, shallow soils, poorly drained soils, and areas with limitations for septic tanks. Detailed soils information is presently being produced and collected by the District Soil Conservation Service. The entire area may be classified as one in which soil limitations are common to most of the soils present, as articulated in the following excerpt from the 1977 Land Development Plan:

There are several different soil associations located within the planning area. These associations are the Lynchburg-Goldsboro-Dunbar, the Lenoir-Craven-Bladen, and the Bladen-Portsmouth-Bayboro. The importance or significance of these soil associations is related to their capacity for general development. For example, an association may be highly valuable for agricultural production although, due to certain characteristics, undesirable for residential development. These undesirable characteristics include

carrying capacity for road construction or drainage functions which require expensive construction techniques or modified septic systems. The new wastewater treatment facility will improve the development potential of these soil associations.

The largest soil association in the planning area is the Lenoir-Craven-Bladen Association. The association extends from Bath Creek west to S.R. 1334, a distance of approximately three miles. The association is characterized by moderately well to poorly drained soils.

The slope ranges from nearly level to fifteen (15%) percent. These soils have a medium textured surface and a firm clay subsoil. With respect to general development, the association poses severe limitations upon septic tank operations. The severe limitation label implies that the association has one or more properties unfavorable for the use, and the limitations are difficult and costly to overcome, requiring major soil reclamation, special design or intense maintenance. It must be remembered, however, that each proposed property ought to be evaluated, since these are only general characteristics of a soils association and not a detailed analysis of soil types. In general, based upon the general soils information, development which may occur west of Bath Creek should be characterized by large lot single-family units, which the Town can cause to occur through its Zoning Ordinance. The association poses limitations upon not only septic tanks, but also bearing strength for structures due to a relatively high water table and hazard from flooding.

The next largest association occurring in the planning area is the Bladen-Portsmouth-Bayboro Combination. This association is located primarily on the east side of Back Creek, north and south of NC 92. The association is characterized by poor to very poorly drained soils on a nearly level terrain.

Surface texture ranges from fine sandy loam to mucky loam. The subsoils range from friable, or brittle, sandy clay loam to very firm clay. These soils also place severe limitations upon the operation of septic tanks. These limitations are related to the high water table, flooding hazard, and poor permeability. In addition, the soils exhibit limitations upon the development of transportation routes. Thus, if development occurs, the specific tract ought to be evaluated to establish the severity of problems posed by the soil. In general, development should be on large lots, having adequate area for extended drainage fields. Waterfront development should be large lot, single family development.

The third soil association found in the area is located in the area between Bath Creek and Back Creek and extending north to S.R. 1743. The soils are of the Lynchburg-Goldsboro-Dunbar variety. The soils do have limitations upon septic tanks, similar to those previously discussed. However, it appears that the drainage characteristics of the association pose few limitations upon road construction and housing foundations. It is significant to note that this area may well be the best area for future development, particularly since the incorporated area of Bath is located within this area. It must be pointed out that septic tank operations are adversely affected by this soils association and extra maintenance may be required.

Sources of Water Supply

There are two sources of water available to most communities: ground water resources and surface water supplies such as reservoirs. The water supply source for the Town of Bath and the adjacent planning area is derived from ground water supplies. The main source is the Castle Hayne Aquifer. Although ground water is the source of all water, the actual distribution of

water does vary ranging from individual wells to a central water distribution system.

In the majority of the area of extraterritorial jurisdiction, individual wells are the only source of water. The only exception is the Springdale Village which has access to the central water supply for the Town. Therefore, future development must rely upon ground water supplies.

In the past, there has been a real concern about lower ground water levels as a result of phosphate mining by Texas Gulf. Since the initiation of mining, ground water levels have been modified but at this time no significant impacts upon individual wells in the Bath area have developed. Recent studies by the Ground Water Division of the North Carolina Department of Natural Resources and Community Development indicate that no problems should occur in the future.

Areas Where the Predominant Slope Exceeds 12 Percent

As noted above, the Lenoir-Craven-Bladen soils which extend west of Bath Creek for a distance of three miles have slopes ranging from 0 to 15%. The topography plotted on Map G - Flood Prone Areas (page 90) indicates that other areas of greater than 12% slope occur on the partially eroded shoreline of the creeks. Development on steep slopes is liable to cause a disproportionately large increase in run-off and also present an erosion hazard even on soils not especially prone to erosion. In addition, septic tanks are difficult to locate on steep slopes without effluent issuing at the service.

Fragile Areas

Areas which could easily be damaged or destroyed by inappropriate or poorly planned development in the Town of Bath and its district include: the AECs; a series of properties on the state registry of historic places; and

scenic places such as Bonner's Point.

The area has none of the following: sand dunes along the outer banks; ocean beaches or shorelines; estuarine waters; areas which sustain remnant species; areas containing unique geological formations; registered natural landmarks or others such as wooded swamps, prime wildlife habitats, and prominent high points.

Areas with Resource Potential

As noted in the resource production section above, the area is generally productive for agricultural lands, but has no specific productive and unique agricultural lands. The potentially valuable phosphate concentration is addressed above in the same section. There are no publicly owned forest, or fish and game lands in the area and no privately owned wildlife sanctuaries.

Bath, as noted above, has approximately one-third of its incorporated area consumed by publicly owned parks or vacant lands. These areas serve to prohibit development on the water's edge and support the state's historic interest. Other beneficial uses of these areas are addressed in Section II -- Economic and Community Development.

The Town has no other non-intensive outdoor recreation lands, in that most of such activity takes place in the waters of Bath and Back Creek.

F. Capacity of Community Facilities and Estimated Future Demand

Population Projections

The 1980 population (within Town limits) of the Town of Bath was 184 persons. Estimates released in July 1984 by the NC Office of State Budget and Management places the 1984 population of Bath at 238 persons, an approximate 3.75% annual growth rate.

Assuming the growth rate has continued since 1984, the 1986 population

projection for the Town of Bath is 267 persons.

Should this growth rate continue, the Town of Bath will have:

- 278 persons in 1990
- 330 persons in 1995
- 392 persons in 2000

Housing

In 1980 there were 118 housing units, 90 of which were occupied year round. Of the 28 remaining houses not occupied year round, 15 were held for occasional use. The average household size (of year round occupied) was 2.4 persons.

Assuming household size has remained and will continue to remain relatively constant at 2.4 persons per year round occupied household, growth in year round occupied housing stock will be as follows:

- 113 occupied housing units in 1986
- 116 occupied housing units in 1990
- 138 occupied housing units in 1995
- 163 occupied housing units in 2000

1980 housing unit data is from the U.S. Department of Commerce, Bureau of Census. A housing unit is described as a house, apartment, group of rooms, single room, or mobile home.

Water Services

The central water distribution system for Bath comprises two wells capable of providing 75 gallons per minute each. On a daily basis, the two wells together can provide up to 216,000 gallons of water per day.

The system presently serves approximately 130 households which together use approximately 22,000 gallons per day; 16 commercial establishments which together use approximately 5,000 gallons per day; the Bath High School which uses approximately 3,000 gallons per day, and the Historic Visitor Center

which uses approximately 350 gallons per day. The current total usage of the water system is approximately 30,350 gallons per day, or 14% of the designed capacity. There is an unused capacity of 185,650 gallons.

The 1980 Bath Land Use Plan cited problems with the existing water system, principally the aeration building is in need of repair and other maintenance is warranted. These conditions have not changed to date and will have to change before unused capacity can be utilized.

Assuming the growth in households served will parallel the growth in population and housing stock within Town limits (3.5% per year), plus assuming a crude estimate of one new commercial establishment per year, the following Bath water system projections are presented:

- 34,810 gallons per day in 1990 (16% of capacity or 181,190 gallons unused)
- 40,295 gallons per day in 1995 (19% of capacity or 175,705 gallons unused)
- 45,780 gallons per day in 2000 (21% of capacity or 170,220 gallons unused)

Given that the new wastewater treatment system may spur an increase in development these numbers may be conservative.

Wastewater System

The Town of Bath is currently in the process of constructing a wastewater treatment system. Construction began in May 1986 and is expected to be completed by December 1986. The design capacity of the system will be 40,000 gallons per day. Upon completion of construction and hook-up of all existing households, commercial establishments, and institutional users currently hooked up to the water system, the wastewater system will be utilized at an approximate rate of 30,350 gallons per day, or approximately 76% of the designed capacity. At this rate there will be an excess capacity of 9,650

gallons.

Assuming the water utilization projections cited earlier:

- in 1990 the Town's wastewater system will be operating at 87% capacity
- in 1995 the Town's wastewater system will be operating at 100% capacity

These projections are made assuming the number of households hooking up to the system will increase at a rate of approximately 3.5% per year (with an assumed utilization of 170 gallons per day), one commercial establishment will hook up per year (with an approximate utilization estimate of 315 gallons per day), and no additional institutional users will be hooked up.

Actual utilization will vary depending on the type of commercial establishment proposing to hook up to the system.

The following table can be used as a guideline for determining approximate utilization as commercial establishments propose to develop in Bath:

Demand in Terms of Daily Flow

<u>Type of Establishments</u>	<u>Daily Flow for Design</u>
Residences	100 gpd/person
Airports, also RR Stations, bus terminals (not including food service facilities)	5 gal/passenger
Barber Shops	100 gal/chair
Beauty Shops	125 gal/booth or bowl
Bowling Alleys	50 gal/lane
Camps	
Construction or work camps	50 gal/person
Summer camps	50 gal/person
Camp grounds	150 gal/campsite
Churches	5 gal/member
Country Clubs -- Resident members	75 gal/person
Non-resident members	20 gal/person
Day Care Facilities	15 gal/person
Factories (exclusive of industrial wastes) -- per shift	25 gal/person
Hospitals	300 gal/bed
Laundries (self-service)	500 gal/machine
Motels/Hotels	75 gal/room
With cooking facilities in room	125 gal/room
Resort	200 gal/room
Offices -- per shift	25 gal/person
Nursing/Rest Homes -- With laundry	150 gal/bed
Without laundry	75 gal/bed
Residential Care Facilities	75 gal/person
Restaurants	40 gal/seat
Schools: Day Schools	15 gal/person
Note: Use 20 gal/person if aerobic treatment is proposed	
Boarding Schools	75 gal/person
Day Workers	25 gal/person
Service Stations	250 gal/water closet or urinal
Stores -- Note; if food service is included, add 40 gal/seat	250 gal/water closet or urinal
Swimming Pools and Bathhouses	10 gal/person
Theaters - Auditoriums	3 gal/seat
Drive-In	5 gal/Car space
Travel Trailer Parks	150 gal/space
Source: Statutory Authority G.S. 143-215.1; 130-160; Eff. Feb. 1, 1986.	

School System

The Bath High School is the only educational institution in Town. According to Jack Wallace, principal of the school, the 1985-86 enrollment (K - 12) was approximately 850 students. Capacity for the school system is approximately 950.

Roads

The transportation infrastructure is comprised of roads which are both paved and unpaved (see Map A - Existing Land Use on page 79). Within the corporate limits of Bath is one street which is unpaved (Bowen Ave.).

Within the area of extraterritorial jurisdiction, there are approximately six (6) streets or roads which are unpaved. Three of these rights-of-way have been, or are in the process of becoming, developed for residential purposes. At the present time there are approximately twenty (20) dwelling units along the road, which represent only about seventy to seventy five percent (70-75%) of the estimated number of units which may ultimately be constructed.

Along the eastern portion of NC 92 there are two other unpaved roads which are also in the process of being residentially developed. The majority of these units are second homes. Although they are not rapidly developing areas, they may ultimately provide access for many non-resident land owners. This will be particularly true as the population of eastern North Carolina continues to increase, and recreational opportunities become more available. These two roads are S.R. 1767 and a private road located immediately east of the Back Creek Bridge on NC 92. That road currently provides access to a partially developed subdivision and its maintenance is the responsibility of

the subdivision homeowner's association.

Of the three unpaved roads, two are experiencing developmental activity. The first road is located on the west side of Bath Creek and south of NC 92. The road is not under the jurisdiction of the State Department of Transportation for maintenance. This access road has five dwelling units which have been constructed. The second unpaved road is S.R. 1340. The portion of this road which is adjacent to Bath Creek has experienced a high level of development.

The importance of the unpaved roads within the planning area is twofold: their potential for development, and their maintenance problems. In addition, the rights-of-way fronting on or having direct access to one of the creeks will no doubt experience pressure for development. This increased development, in turn, places greater demands upon governmental services, particularly if development significantly increases the area's population.

The maintenance question is equally important, particularly due to the financial implications. As these roads become developed for residential and commercial purposes, demands will be made for better maintenance and finally, for paving. A question which arises concerns who ought to bear the cost of the road paving. Should the Town or county bear that cost or should the users of the road bear the expense? This question becomes particularly acute regarding roads which do not have the minimum required dedicated right-of-way. At the present time this situation exists on several of the unpaved roads, particularly those which are not on the state system.

The Town will not be responsible for the maintenance of private roads and/or roads outside of the Town limits.

III. Policy Discussion and Implementation Strategies: Overview

"Policy" can be defined as an expressed set of adopted statements which are to be used to guide future development decisions. Taken together, the following narrative constitutes a broad development direction for guiding the Town of Bath's growth.

These policies serve to update those provided by the 1981 Land Use Plan. An analysis of the Town's achievements with respect to the policies set forth in the 1981 Land Use Plan is contained in Section VII of this plan.

The policy objectives and implementation strategies presented in this document derive from a careful analysis of policies contained in previous plans and studies, published data, household surveys, public hearings, and direction provided by the Bath Planning Board.

The following policy discussion is presented in the five major categories of policy development outlined by the Division of Coastal Management of the NRCO, plus a sixth category - "Intergovernmental Coordination" which briefly describes the relationship between the Town of Bath and Federal, State, and County regulatory agencies. The categories of this section are:

- A. Resource Protection
- B. Resource Production and Management
- C. Economic and Community Development
- D. Storm Hazard Mitigation
- E. Continuing Public Participation
- F. Intergovernmental Coordination

For each major policy category, an overview discussion and its relevance to local conditions in the Bath planning jurisdiction is provided. This is followed by a summary of Policy Objectives with recommended Strategies for Implementation.

A. Resource Protection

Introduction

The protection of Bath's natural and cultural resources is a primary concern of a vast majority of Bath residents. This was the outcome of the 1986 Bath Household Survey, conducted as a part of this land use planning process. (For a description of the 1986 Bath Household Survey and its results turn to Section **IV.E - Continuing Public Participation** on page 59).

When asked to gauge the importance of various issues facing the Town of Bath, citizens of Bath and its planning jurisdiction rated the following issues as the most serious facing them today:

- Pollution of creeks/ivers from farmland water runoff.
- Phosphate mining operations along and within the Pamlico River.
- Pollution of creeks/ivers from industry.
- Protection of cultural historical areas.

In a similar vein, when asked what potential development types they would most desire, the citizens of Bath indicated they preferred the protection of natural resources and the development of historic and cultural attractions above all other potential development types.

The results of the survey are not surprising. Bath comprises people who have been brought up on the water, many of whom are dependent upon the water as their vocation. In addition, residents of Bath have been brought up with a sense of history and tradition, more so than anywhere else in the state.

Areas of Environmental Concern

Two AECs exist in the Bath planning jurisdiction - coastal wetlands and public trust waters. Map D - Fragile Areas (page 87) shows the location of these two areas.

Coastal wetlands in Bath consist of salt marshes which "are subject to

regular or occasional flooding by tides, including wind tides . . ." Like other wetlands, they support the unique productivity of the estuarine system.

Currently protection of the marshes has been achieved through thoughtful monitoring of bulk-heading and enforcement of permit authority by the CAMA permit office. At the very least, this level of concern should be maintained in the future. The Town of Bath encourages even stricter enforcement of CAMA regulations by the CAMA permit officer.

The second type of AEC found in the Bath planning jurisdiction is public trust waters. These include all navigable waters - Bath and Back Creeks.

The Town of Bath has chosen a set of policy objectives and strategies for implementation which stimulate desirable uses of AECs, rather than oppose development altogether. Those policy objectives and strategies for implementation follow this narrative.

Development in AECs may be appropriate only in AECs which are non-productive regarding the support of the estuarine system. It is the responsibility of the Planning Board to decide what development may be appropriate on a case by case basis. The following criteria serve as guidelines for development decisions in these areas:

Development shall not cause significant damage to natural resources.

Development shall not interfere with existing public rights of access to, or use of, navigable waters or public resources.

All development projects shall preserve and not weaken natural barriers to erosion.

All development projects shall limit the construction of impervious surfaces, and other areas prohibiting natural drainage, to only the area necessary to adequately serve the use of the lot.

All development projects shall meet the standards of the N.C. Sedimentation Pollution Control Act of 1973.

Development shall not cause major or irreversible damage to valuable, documented historic architectural or archeological resources.

The project must comply with the local land use plan.

Constraints to Development

Several constraints to development exist in the Bath planning jurisdiction. These include:

- Inadequate wastewater treatment
- Poor condition of water system
- Areas of potential septic difficulty

The Town has long had a problem with inadequate wastewater treatment facilities. This constraint was identified in the 1981 Land Use Plan, which led to the development of a wastewater system for the Town of Bath.

Construction on the wastewater system began in May 1986 and is expected to be completed by December 1986.

The service area for the wastewater system is shown in Map B - Community Facilities Classification Map (page 85). The Town of Bath must continue, however, to be wary of this constraint. Development of the wastewater system has increased building permit activity. The Town must make sure that building development does not exceed capacity of the wastewater system.

The water system of the Town of Bath has also been cited as a constraint to development. Need for repair and a history of lack of maintenance were cited as problems with the water system in the 1981 Land Use Plan. With much of the Town's attention since 1981 devoted to development of the wastewater system, these problems still exist.

Certain parts of the planning jurisdiction present constraints to development from high water tables and poor drainage. These areas are

identified in Map E - Areas of Potential Septic Difficulty (page 88).

The Town intends to direct development with proper consideration of soils. Development where soils have a high water table or poor drainage will be limited.

Specific Local Resource Development Issues

Although none of the land within the Bath planning jurisdiction is considered prime farmland, much of the land still has good crop growing characteristics and warrants careful management.

The Town of Bath recognizes the need for orderly growth within the Town limits and wastewater system service area. The farmland in this area will be considered for future development. Farmland in areas designated as rural or conservation on Map I - Land Classification (page 92) will be protected.

Cultural and Historic Resources

As shown on Map C - Historic District and Inventory of Historic Properties (page 86), much of the Town of Bath is an Historic District. The citizens of Bath, as evidenced by the household survey results, place a high value upon these resources.

There also exists six archeological sites, as recorded by the NC Division of Archives and History, in the Bath planning jurisdiction (see Map C, page 86). The Town intends to develop better coordination with the NC Division of Archives and History regarding its development activities. Consultation with the NC Division of Archives and History will take place before any development in these areas occurs.

The Town of Bath enthusiastically protects its Historic District. The Bath Planning Board serves as the Bath Historic District Commission. All proposed building within this area undergoes close scrutiny.

Man-made Hazards and Other Hazard Areas

As shown in Map F - Storm Hazards map (page 89), the Town of Bath contains several dilapidated structures, an unauthorized dumping site, leached septic tanks.

The Town has an on-going voluntary program of demolition and hazard removal, under the supervision of the Bath Planning Board. Before demolition, it is recommended however, that every effort to preserve or restore the structure be made.

The Town has also passed a resolution opposing the expansion of military airspace in Beaufort County.

In addition to man-made hazards, excessive erosion areas exist in the Bath planning jurisdiction. A 1975 Shoreline Erosion Inventory by the US Department of Agriculture offers the following evidence of the erodibility of Bath Creek:

Average width of loss to erosion	25.2 ft.
Average height of bank	3.7 ft.
Length of shoreline eroding	10.1 miles
Length of shoreline accreting	0
Total length of shoreline	12.2 miles

In order to take appropriate measures for erosion areas in the planning areas, the Town must work with NRCD to conduct a feasibility study or an assessment of available erosion prevention measures to be incorporated in the Town's zoning ordinance.

Other Revelant Issues

Other relevant issues that this plan must address, under CAMA guidelines, include:

- Hurricane and flood evacuation needs (see 3.a.b page 57, 3.a page 58)
- Protection of potable water supply (see 5.a,b page 47)

- Sewage treatment (see 4.a page 47, 4.a,c. page 54)
- Stormwater runoff (see 1.g page 45, 6.b page 47, 5.b page 51)
- Marina/floating home development (see 2.a page 46, 1.b,c. page 50)
- Industrial impacts on fragile areas (see 1.a page 45, 3.d page 51)
- Development of sound and estuarine system islands (see 2 page 46)
- Development of package treatment plants (see 5.c page 47)

These issues are addressed in the policy objectives and strategies for implementation following this narrative or contained in narrative discussing the issues under the remaining CAMA categories.

I RESOURCE PROTECTION

POLICY OBJECTIVE	STRATEGIES FOR IMPLEMENTATION
1 Protect water quality of Bath and Back Creeks.	<ul style="list-style-type: none">a. Monitor all proposals for development on shore lines. All development proposals must be within the strictest CAMA standards set forth in 15 NCAC 7B and outlined in A Handbook for Development in North Carolina's Coastal Area, published by the Division of Coastal Management of the NRCD and consistent with this land use plan. Section 4.14 of the 1982 Bath Zoning Ordinance states that proposed uses or structures for AEC's must comply with state guidelines.b. Do not permit the following uses: open dumping of waste, including wastewater, dumping of trash, improperly operating motor-driven boats which contribute gas and pollution (Sect. 9.03 of the Zoning Ordinance outlines the requirements for water supply and sewage disposal); further development of commercial wet docking storage facilities, and multi-level dry docking storage facilities (Sect. 7.09 of the Zoning Ordinance outlines the regulations governing marinas).c. Encourage stricter enforcement of CAMA regs. by CAMA permit officer.d. Encourage stricter enforcement of all water quality regs. by Division of Environmental Management.e. Investigate/implement means of extending southern border of existing planning jurisdiction.f. Seek funding to provide technical assistance in investigating the potential reduction of agricultural nonpoint source pollution (sediment, nutrients, animal wastes, and pesticides); via such means as conservation tillage, filter strips, sediment control structures, etc.g. Seek funding to provide technical assistance in developing a stormwater drainage system plan.h. Develop program for removing existing pilings in public trust waters. Seek assistance from N.C. DOT in pulling up pilings.

- i. Sponsor education and training workshops for all citizens of Bath in coordination with NRCD and other groups whose primary interest is protection of water quality.
 - j. Protect waterways from improper infilling and dredging.
 - k. Initiate process of opening waters previously closed to fishing by upgrading classification.
 - l. Encourage enforcement of speed limits on public trust waters by U.S. Coast Guard.
 - m. Work toward amending the Town Zoning Ordinance to encourage shoreline development setbacks and/or vegetated buffers along the perimeter of fragile wetlands and water bodies.
- 2. Protect areas of environmental concern (environmentally sensitive lands).
 - a. Encourage stricter enforcement of permit authority by the CAMA permit officer and eliminate any further marine development.
 - b. Permit only "water-dependant" uses in coastal wetlands, estuarine waters, and public trust waters areas of environmental concern located in the Bath planning district.
 - c. The location, design, and construction of any project in an AEC must give highest priority to the conservation of coastal wetlands, estuarine waters, and the resources in public trust areas to safeguard and perpetuate their biological, economic, and social values; and protect public rights of navigation and recreation in public trust areas.
 - d. Act in accordance with Sect. 4.14 of the Zoning Ordinance which states that the zoning administrator and the local AEC Permit Officer must certify that a proposed use or structure located in an AEC complies with development standards of the "State Guidelines for AEC's prior to issuing any zoning permit.

3. Protect agricultural lands located in areas designated as rural or conservation on 1986 Land Classification Map.
 - a. Identify most productive agricultural lands not required for future town growth and restrict non-agricultural uses in these lands.
 - b. Upon identification of these lands, petition the county to use special tax incentives which will allow these lands to remain productive.
4. Protect cultural/historic resources.
 - a. Continue strict regulation of all development within the Bath Historic District.
 - b. Encourage compatible development within Bath Historic District. Compatible development includes any development in keeping with the current Zoning Ordinance (Article VIII) having architectural features in harmony with other buildings in the Historic District.
5. Protect potable water supply.
 - a. Engage authorities of the County Health Department and the Regional Office of Environmental Health to monitor the incidence of coliform pollution in the town's water system before and after development of the wastewater system.
 - b. Designate the upgrading/expansion of the wastewater system as the next major community facility capital expenditure.
 - c. Encourage package treatment use for large scale development projects.
6. Investigate and implement available erosion prevention measures.
 - a. Seek funding to provide technical assistance in investigating the potential reduction of agricultural nonpoint source pollution (sediment, nutrients, animal wastes, and pesticides); via such means as conservation tillage, filter strips, sediment control structures, etc.
 - b. Seek funding to provide technical assistance in developing a stormwater drainage system plan.
 - c. Act in accordance with the Erosion and Sedimentation Control Plan filed with the Division of Land Quality.

B. Resource Production and Management

The purpose of this section is to discuss areas in the Bath planning jurisdiction that offer production potential and which must be effectively managed to realize their fullest potential.

Bath's most important area of resource production potential is commercial fisheries. This is evident after examination of the 1986 Bath Household Survey results. The policy objectives and strategies for implementation following this narrative are designed to protect this valuable resource.

Agricultural lands are also a prime resource in the Bath planning jurisdiction. Beaufort county is annually among the leaders in North Carolina in corn, grain, and soybean production. The policies developed in this plan will protect all agricultural lands contained in areas designated rural or conservation on Map I - Land Classification (page 92).

Another source of resource production which Bath would like to discourage is phosphate mining. Massive deposits of phosphate and ore lie beneath the land surface and water bodies in the Bath planning jurisdiction. As evidenced in the 1986 Bath Household Survey, potential phosphate mining is considered as a seriously important issue in the area.

Bath has had the opportunity to watch the development of Texas Gulf on the south shore of the Pamlico River and considers the economic benefits of each production less beneficial than the benefits derived from protecting water quality.

Currently it is too expensive to mine phosphate so far beneath the surface of Bath. Technology, however, is rapidly changing. Bath must act now to impede the growth of phosphate mining in its planning jurisdiction.

Other issues to be addressed in this section include off-road vehicles and commercial forestry. Neither is applicable in the Bath planning jurisdiction.

RESOURCE PRODUCTION AND MANAGEMENT

POLICY OBJECTIVE	STRATEGIES FOR IMPLEMENTATION
1. Protect and promote the commercial fishing industry.	<ul style="list-style-type: none">a. Encourage the monitoring of algae growth by the Div. of Environmental Management.b. Prohibit further development of wet and dry storage marinas on Bath and Back Creeks. Sect. 7.09 of the Zoning Ordinance outlines the present regulations governing marina development.c. Prohibit floating home development on Bath and Back Creeks by amendment to the Zoning Ordinance.d. Encourage the Coast Guard and N.C. Wildlife officials to check moored boats in Bath and Back Creeks for open heads and discharge.e. Establish Bath Pier Development Project (see Objective 6).
2. Protect agricultural lands located in areas designated as rural or conservation on 1986 Land Classification Map.	<ul style="list-style-type: none">a. Identify most productive agricultural lands not required for future town growth and restrict non-agricultural uses in these lands.b. Upon identification of these lands, petition the county to use special tax incentives which will allow these lands to remain productive.
3. Discourage phosphate mining operations within the Town's planning jurisdiction and adjacent areas.	<ul style="list-style-type: none">a. Maintain cordial communication with Texas Gulf regarding their potential expansion.b. Acquire technical assistance from the Environmental Section of the N.C. Division of Coastal Management to develop standards and criteria prohibiting the potential expansion of phosphate mining and incorporating those criteria and standards into the Bath Zoning Ordinance.c. Encourage neighboring communities to develop policies prohibiting expansion of the phosphate mining industry into their planning jurisdictions.d. Support the prohibition of phosphate and other types of mining in public trust waters.

4. Engage in the removal of all man-made hazards.
 - a. Encourage the voluntary filling of unused septic tanks.
 - b. Develop program for removing existing pilings in public trust waters. Seek assistance from N.C. DOT in pulling up pilings.
 - c. Protect waterways from improper filling and/or dredging.
 - d. Protect public trust waters from mining.
5. Investigate and implement available erosion prevention measures.
 - a. Seek funding to provide technical assistance in investigating the potential reduction of agricultural nonpoint source pollution (sediment, nutrients, animal wastes, and pesticides); via such means as conservation tillage, filter strips, sediment control structures, etc.
 - b. Seek funding to provide technical assistance in developing a stormwater drainage system plan.
6. Establish Bath Pier Development Project.
 - a. Seek funding for development of a dock where fisherman can unload their catch. Potential funding sources include NRCD Recreation Funds, NRCD Land and Water Conservation Fund, and NRCD Wildlife Resources Commission, Division of Inland Fisheries Fund.
 - b. Encourage coordination among government regulations regarding waterfront development.
7. Off-road vehicles
 - a. Not applicable.
8. Commercial Forestry
 - a. Not applicable

C. Economic and Community Development

The pleasant location of Bath, between the Bath and Back Creeks, and the construction of the wastewater system is making the area very attractive to developers. The Town of Bath is very alert to the problems that uncontrolled growth can pose. The Town intends to monitor all development within its planning area closely.

Desirable Development

The 1986 Bath Household Survey, described in Section III.E - **Continuing Public Participation** (page 59) extensively surveyed the residents of Bath. With those results in mind, the Bath Planning Board will encourage the following types of development:

- Continued protection of natural resources
- Continued protection of historic and cultural resources
- Continued protection of agricultural lands
- Restaurants and retail shops
- Overnight accommodations
- Housing for elderly and low-income groups

The Planning Board intends to continue eliminating private marinas, and discourages water access for sailboats only, and subdivision development wherein the Town provides all facilities.

The desired pattern of growth is described in Section V of this plan - **Land Classification**. In short, it is desired that residential and small business development happen within Town limits before happening out of Town limits (Map I - Land Classification on page 92). This will allow the Town to expand its tax base while keeping costs associated with expanding community facilities to a minimum.

The agriculture and fishing industries are the industries the Town intends to promote. It is hoped that through grantsmanship the Town can procure funds with which to promote these industries.

Given a small town budget, extension of community services is very difficult for the Town of Bath to initiate. As such, the Town must make it policy that all development requiring the expansion of community services will be the financial responsibility of the developer. The Board of Commissioners is in the process of establishing policy outlining the costs associated with hooking up to the wastewater system. As other development presents itself, whether it be wastewater system expansion or road paving, similar policies will be developed. The Zoning Ordinance should reflect these policies.

The Town of Bath has a history of supporting all federal, state, and county programs. A list of these programs is contained on page 115.

ECONOMIC AND COMMUNITY DEVELOPMENT

POLICY OBJECTIVE	STRATEGIES FOR IMPLEMENTATION
1. Support expansion of existing industry and recruitment of new industry.	<ul style="list-style-type: none"> a. Work with industrial recruitment staff of N.C. Dept. of Commerce. b. Solicit technical assistance from regional development groups: Mid-East Commission and Northeastern North Carolina Tomorrow. c. Encourage development of restaurants, overnight accommodations, and retail shops.
2. Preserve the community based school as a working, viable facility.	<ul style="list-style-type: none"> a. Monitor actions of Beaufort County Board of Education. b. Maintain at a minimum grades K - 12 in Bath.
3. Maintain and enhance the availability of adequate housing for elderly and low income persons.	<ul style="list-style-type: none"> a. Encourage housing development by not-for-profit groups. b. Provide financial support as possible.
4. Improve infrastructure and services to accomodate future growth.	<ul style="list-style-type: none"> a. Seek additional funding for the upgrading and expansion of the water and sewer system. b. Seek additional funding for the upgrading and expansion of the streets and roads in designated areas. c. Designate the upgrading/expansion of the wastewater system as the next major community facility capital expenditure. d. Provide for the adequate collection and disposal of garbage. e. Encourage the expansion of both the police and fire departments. Promote the development of police department.
5. Promote tourism and recreational industry development.	<ul style="list-style-type: none"> a. Encourage initiatives directed towards enhancing tourist activities in the area. b. Establish Bath Pier Development Project (see Objective 7). c. Continue sharing promotional efforts with the State of Bath's historic properties.

6. Protect Bath's cultural/historical resources.
 - a. Encourage compatible development between historic and non-historic properties.
 - b. Promote quality commercial development.
 - c. Encourage the demolition of dilapidated housing.
 - d. Encourage the rehabilitation and productive use of older structures.
7. Establish Bath Pier Development Project.
 - a. Seek funding for development of a dock where fisherman can unload their catch. Potential funding sources include NRCD Recreation Funds, NRCD Land and Water Conservation Fund, and NRCD Wildlife Resources Commission, Division of Inland Fisheries Fund.
8. Prevent private, commercial marina development.
 - a. Retain zoning ordinance to disallow all future private marina development.
9. Provide a location for potential energy facility sitings as opportunities present themselves.
 - a. Examine potential energy facility siting proposals thoroughly before authorizing construction.
 - b. Oppose all proposals for potential location of a nuclear energy facility.
 - c. Permit energy facility sitings in locations zoned I-L (Light Industrial District).

D. Storm Hazard Mitigation

The importance of a sound storm mitigation or hurricane planning cannot be over-emphasized. There are three major reasons for such planning.

- 1) To save lives.
- 2) To save capital investments.
- 3) To save irreplaceable natural resources.

Residents of Bath have always lived under the threat of hurricanes and their potentially disastrous results. As the Town grows, so grows the severity of loss. Due to this ever-increasing severity of loss it is important to plan now to be prepared for tomorrow.

The purpose of this section is to provide a brief overview of the guidelines in planning for a major storm. These general guidelines are elaborated upon in accordance with CAMA guidelines, in Section IV of this plan - Storm Hazard Mitigation found on page 62.

STORM HAZARD MITIGATION

POLICY OBJECTIVE	STRATEGIES FOR IMPLEMENTATION
1. Protect areas of environmental concern and environmentally sensitive lands.	<ul style="list-style-type: none">a. Continue enforcement of permit authority by CAMA permit officer.b. List specific appropriate and inappropriate uses for each AEC in the City Zoning Ordinance (See page 40).
2. Maintain and/or strengthen existing policies known to decrease the risk of hurricane damage.	<ul style="list-style-type: none">a. Enforce the State Building Code taking maximum advantage of its construction standards which deal with its effects of high wind.b. Support the local CAMA Permit Officer in discouraging the construction of hotels, restaurants, and similar large commercial structures in erosion-prone areas.c. Act in accordance with the Erosion and Sedimentation Control Plan filed with the Environmental Management Commission.d. Encourage the removal of all structures and uses which are in non-conformance with hazard mitigation policies.e. Develop a policy addressing the relocation of damaged structures out of hazardous areas.f. Continue to use the Zoning Ordinance as an instrument to mitigate hurricane damage.
3. Increase public awareness of hurricane preparation.	<ul style="list-style-type: none">a. Conduct a risk-avoidance education program through the Office of Emergency Management to advise current and prospective developers of existing storm risks in Bath.b. Conduct hurricane education program through the Office of Emergency Management in all public schools to instruct youngsters what to do in the event of a storm.

In the event of a major storm...

1. Prioritize all clean-up efforts.
 - a. Service facilities (electricity, water sewer, etc.) should be repaired first.
 - b. Public facilities which could be used for additional shelter should be repaired next.
 - c. A "worst damage" approach should follow afterwards.
 - d. The city should be prepared to adopt a temporary moratorium on all new development until reconstruction is complete.
2. Create a "Recovery Task Force" and allocate responsibilities among members.
 - a. The task force should include the following members or representatives:
 1. Town Administrator
 2. Mayor Pro Tem
 3. Chief of Volunteer Fire Dept.
 4. Community Rescue Squad Appointee
 5. President of Ruritan Club
 6. President of Lion's Club
3. Coordinate all efforts with necessary County, State, and Federal agencies.
 - a. Upon establishment of the "Recovery Task Force" and allocation of responsibilities, notify agencies listed under Intergovernmental Coordination.

E. Continuing Public Participation

Public participation was a vital concern during the process of preparing the 1986 Bath Land Use Plan.

Planning for the public input began in December, 1985, after the Town's consultants, Planning & Design Associates, P.A., had researched all past plans and met with the Town Board of Commissioners (Appendix A, page 94) and the Town Planning Board (Appendix B, page 95).

After these initial steps were completed, a household survey was drafted. This draft was reviewed by the Town Board of Commissioners and the Planning Board. Upon their review, a final draft was completed and distributed to as many households in the Bath Planning Area as possible. A copy of the 1986 Bath Household Survey is contained in Appendix C on page 96.

The survey questioned the Bath residents' attitudes regarding the importance of particular issues in the Bath area. The survey also questioned peoples' attitudes regarding potential types of development, as to whether particular types of development were desirable or undesirable. All responses were tabulated. The absolute results appear in Appendix D, page 102.

Ninety-seven (97) completed surveys were received. The section of this plan describing the description of existing conditions estimates that there are approximately 113 occupied housing units within Town limits now. Assuming there are near 50 housing units in the extraterritorial jurisdiction (see Existing Land Use Map, page 79), approximately 163 households exist in the total planning area. These survey results reflect the attitudes of approximately 60% of all households in the Bath planning area.

After receiving the results of the survey the Planning Board had six board meetings concerning the Land Use Plan Update:

May 12, 1986
June 2, 1986
June 9, 1986
June 23, 1986
July 14, 1986
August 11, 1986.

CONTINUING PUBLIC PARTICIPATION

POLICY OBJECTIVE	STRATEGIES FOR IMPLEMENTATION
1. Encourage participation in land use discussion by all sectors of the population.	a. Develop a roster of civic organization and key individuals to be notified of public meetings regarding land use issues. b. Publicize notices of meetings in local newspaper preceded by feature articles on specific issues to be discussed during upcoming meetings.
2. Educate the citizens of Bath about issues facing the area regarding matters of resource protection, resource production, and community development.	a. Distribute brochures currently available in annual tax bills or in utility bills. b. Prepare public information programs for presentation to civic groups, churches and school classes.

IV. Storm Hazard Mitigation

A. Overview

The importance of a sound storm mitigation plan cannot be over-emphasized. There are three major reasons for such planning:

- 1) To save lives.
- 2) To save capital investments
- 3) To save irreplaceable natural resources

Bath will always face a strong threat from hurricanes, northeasters, and other major storms. As the Town continues to grow, its potential loss increases. Due to this ever-increasing severity of loss it is important to plan now to be prepared for tomorrow.

The purpose of this section is to offer guidelines towards planning for a major storm. Following this overview are five sub-sections which contain the guidelines the Town intends to follow in preparation for a major storm and the reconstruction to occur afterwards.

B. Storm Hazards

The first step in this storm mitigation plan is to identify and map all areas of the community which are most vulnerable to hurricane damages and to identify the damaging forces each area is subject to.

The areas most vulnerable to hurricane or other major storms are all AECs, found within the Bath Planning area. These areas are coastal wetlands and public trust waters. AECs are defined and identified in Section IV.A of this plan. These areas have been classified as conservation. The location of AECs is noted on Map D (page 87).

Other areas vulnerable to hurricane or other major storms are those areas with an elevation below the 100 year flood plain. The 100 year flood plain elevation for the Town of Bath is 10 feet. A map of areas with an

elevation below 10 feet is contained in Map G (page 90). These areas have a 1% chance of flood inundation in any given year.

The entire Bath Planning Area is also vulnerable to hurricane damages.

The areas listed above are subject to damaging forces that include high winds, flooding, erosion, and wave action/battering. SLOSH maps from the Department of Emergency Management identify the likely level of inundation based on storm category. According to these maps approximately one third of the Bath planning area is vulnerable to storms up to 110 miles per hour. These storms cause water to surge 6 to 8 feet above normal. In such storms coastal and low lying roads will be flooded. This information should be taken into account when planning for future development in Bath. The Town must consider policies concerning damaged structures in these hazardous areas. The removal of structures and uses in non-conformance with hazard mitigation policies is encouraged.

The chart below ranks the severity of risk in each hazard area according to the damaging forces which are likely to occur there.

The Bath Planning Area is subject to high wind damage.

A map outlining flood-prone areas is contained in Map G (page 90). A map locating areas subject to erosion and minimal wave action - the AECs, is located in Map D (page 87). A map outlining man-made hazards is located in Map F (page 89).

C. Description of Types and Severity of Risk in Hazard Areas

A key component of this storm mitigation plan is the following description of what is at risk in the Bath Planning Area. This risk description includes, in accordance with CAMA guidelines, an inventory of land uses and an inventory of structures within the planning area. Also provided, as per CAMA guidelines, is an indication of the monetary value of the losses that the planning area might sustain in the event of a major storm.

A narrative description of the inventory of land uses in the Bath Planning Area is contained in Section II.C and an existing land use map is contained in Map A (page 84) of this plan. The land use map enables the Town to measure the severity of what the city has at risk in terms of commercial, industrial, and institutional structures.

What the Town of Bath has at risk is considerable - both in terms of population and in housing structures. There is a total population of approximately 250 in the Town of Bath. There are approximately 120 housing units, 1 institutional structure, 1 utilities structure, and 6 commercial structures. Assuming a median value of 125,000 for the housing units, \$50,000 for the institutional structure, \$50,00 for the utilities structure, and \$30,000 for the commercial structures; the Town of Bath has approximately \$3.28 million worth of buildings at risk.

The evacuability of the Bath Planning Area is discussed in Before the Storm in Beaufort County: Avoiding Harm's Way, the County's storm mitigation plan. Eight evacuation zones have been established in the County. The Bath Planning Area lies within Zone III.

The analysis provided in Before the Storm in Beaufort County provides evidence that the entire Town of Bath is well within the standard warning

time of 12 hours provided by the National Weather Service. The principle road in Bath, Highway 92, is capable of transporting 7150 vehicles per day at 35 miles per hour. This allows the Town of Bath ample room for growth while still maintaining good evacuability.

The Town of Bath has one evacuation shelter available to residents of its planning area -- the Bath High School. The next closest shelter is Beaufort Community College, located between Bath and Washington.

D. Recommended Policies Regarding Storm Mitigation

Policy statements and implementation strategies offered in this section of the Land Use Plan will decrease the Town's risk of hurricane damage:

Policy Objective

1. Protect Areas of Environmental Concern

Strategies for Implementation

- a. Continue enforcement of permit authority by CAMA permit officer.
- b. List specific appropriate and inappropriate uses for each AEC in the Town Zoning Ordinance (see page 40).
- a. Enforce the State Building Code taking maximum advantage of its construction standards which deal with the effects of high wind.
- b. Support the local CAMA Permit Officer in discouraging the construction of hotels, restaurants, and similar large commercial structures in erosion-prone areas.

Policy Objective

- c. Act in accordance with the Erosion and Sedimentation Control Plan filed with the Environmental Management Commission.

3. Increase public awareness of hurricane preparation.
 - a. Conduct a risk-avoidance education program through the Office of Emergency Management to advise current and prospective developers of existing storm risks in Bath
 - b. Conduct hurricane education program through the Office of Emergency Management in all public schools to instruct youngsters what to do in the event of a storm.

E. Reconstruction

According to Before the Storm: Managing Development to Reduce Hurricane Damages, by William D. McElyea, David J. Brower, and David R. Godschalk, a reconstruction plan has four purposes. It should:

1. Expedite community recovery by outlining procedures and requirements before damages occur.
2. Establish a procedural framework for putting storm mitigation measures into effect after disaster strikes the community and buildings and utilities are being repaired and rebuilt.
3. Gather and analyze information concerning the location and nature of hurricane damages in the community.
4. Assess the community's vulnerability to hurricane damages and guide reconstruction to minimize this vulnerability.

Beaufort county has a post disaster reconstruction plan, the Beaufort county Disaster Relief and Assistance Plan, which was adopted in September 1982. That plan addresses post disaster reconstruction, fulfilling all four purposes cited in Before the Storm: Managing Development to Reduce Hurricane Damages.

The Town of Bath should follow the guidelines set forth in that plan, paying particular attention to Annex F (Beaufort County Damage Assessment Plan), Annex G (Disaster Assistance Program Summary), and Annex I (Beaufort County Plan for Temporary Housing).

In addition to following the guidelines of the Beaufort County Disaster

Relief and Assistance Plan, there are several courses of action the Town should take that will complement the Beaufort County Disaster Relief and Assistance Plan. These courses of action will also expedite the successful delivery of the Beaufort County Plan. The following policy objectives and implementation strategies further define the policy statements offered in Section IV of this plan.

Policy Objective

Strategies for Implementation

- | | |
|---|---|
| <p>1. Prioritize all clean-up efforts.</p> | <p>a. Service facilities (electricity, water, sewer, etc.) should be repaired first.</p> <p>b. Public Facilities which could be used for additional shelter should be repaired next.</p> <p>c. A "worst damage" approach should follow afterwards.</p> <p>d. The Town should be prepared to adopt a temporary moratorium on all new development until reconstruction is complete.</p> |
| <p>2. Create a "Recovery Task Force" and allocate responsibilities among members.</p> | <p>a. The task force should include the following members or representatives:</p> <ol style="list-style-type: none"> 1. Town Administrator 2. Mayor Pro Tem. 3. Chief of Volunteer Fire Dept. 4. Comm. Rescue Squad Appointee 5. President of Ruritan Club 6. President of Lion's Club |
| <p>3. Coordinate all efforts with necessary County, State, and Federal agencies.</p> | <p>b. Upon establishment of the "Recovery Task Force" and allocation of responsibilities, notify agencies listed under Intergovernmental Coordination.</p> |

F. Intergovernmental Coordination

The Town of Bath is responsible for reporting all of its activities concerning storm hazard mitigation and hurricane preparedness with the following agencies:

N.C. Division of Coastal Management

State Office: Division of Coastal Management
Department of Natural Resources and Community Development
P.O. Box 27687
Raleigh, NC 27611
(919) 733-2293

Field Office: Office of Coastal Management
Department of Natural Resources and Community Development
1424 Carolina Avenue
P.O. Box 1507
Washington, NC 27889
(919) 946-6481

N.C. Division of Emergency Management

State Office: Division of Emergency Management
Department of Crime Control and Public Safety
116 West Jones Street
Raleigh, NC 27611
(919) 733-3867

Regional Office: Area Emergency Management Coordinator
N.C. Division of Emergency Management
607 Bank Street
Washington, NC 27889
(919) 946-2773

National Flood Insurance Program Information:

Flood Insurance Coordinator
Division of Emergency Management
116 West Jones Street
Raleigh, NC 27611
(919) 733-2850

Federal Emergency Management Agency

National Office: Federal Emergency Management Agency
500 C Street, S.W.
Washington, D.C. 20472

Public Information - (202) 287-0300
Publications - (202) 287-0689

Regional Office: Federal Emergency Management Agency
Region IV
1375 Peachtree Street, N.E.
Atlanta, GA 30309

Public Information - (404) 881-2000
Disaster Assistance Program - (404) 881-3641
Flood Insurance Program - (404) 881-2391

V. Land Classification System

A. Land Classification and Policy Relationship

The Land Classification Map is included in this Plan (Map I, page 92) as a framework for local government to utilize when identifying future land use. The map accompanying the 1986 Bath Land Use Plan is based on documentation from previous plans, studies, and existing published data, work sessions with the Planning Board, and public participation.

The purpose of the Land Classification Map is to illustrate the Town's policy statements provided in this land use plan. The areas shown on the land map serve as a guideline for Bath's official Growth Policy, and, as such, serves as a visual reference for use in policy implementation. It is not a strict regulatory mechanism.

The land classification system renders particular attention to how, where, and when certain types of development will be encouraged or discouraged. The CAMA land classification system contains five broad classes: developed, transition, community, rural, and conservation. Bath's Land Classification Map includes two Transition classes: Transition I indicates areas that have the potential to be developed in the next five years, and Transition II indicates areas that have the potential to be developed and require community services in the next ten years. In the Town of Bath's Planning Area, the community classification is not applicable.

The following narrative describes the classification of the 1986 Bath Land Classification Map.

B. Developed

The purpose of the Developed class is to provide for continued intense development and re-development of existing incorporated areas.

The land designated as developed includes mixed land uses such as residential, commercial, cultural, and other uses at moderate to high densities. The developed area also encompasses an established historic district for which an ordinance has been established.

Bath's current developed area contains enough land to accomodate the probable increase of dwelling units between now and the year 2000. It is desired that residential and small business development occur within the Town's developed area before it occurs outside of the Town limits in the Transition areas.

C. Transition

The Transition classification represents areas that are either presently being developed for urban purposes or have the potential to be developed in the next five to ten years. The Transition category identifies land available to accomodate anticipated population and urban growth in cases where it cannot be adequately absorbed by lands classified as developed. The intent of the Transition classification is to illustrate emerging and developing areas to ensure that the local government is prepared to provide adequate community services to manage such development.

Many of these areas are in, or will be in, a state of "transition" from lower intensity uses to higher intensity uses. Transition I areas indicated on the Land Classification Map are an example of this type of Transition

classification.

In some cases, the Transition classification represents areas that will not dramatically increase in intensity of use but are expected to require community services in the future. Transition II areas are included in this category.

The type of development to occur in these Transition areas is identified as either Mixed, Residential, or Industrial. The purpose of these subcategories is to ensure that appropriate development occurs within a particular area. All development must be monitored to guarantee that it does not disrupt the environmental and cultural integrity of the area. All development must be in accordance with the Policy Objectives identified in this Land Use Plan.

Transition Mixed

There is no Transition I Mixed.

Transition II Mixed is located to the southeast of Town across Back Creek along NC 92. A restaurant is located in this area. More expansive community services will be required in this area within the next ten years.

Transition Residential

Transition I Residential is identified on the Land Classification Map as that area immediately north of Town (west of King Street) up to Possum Hill Road. It also includes frontage on Possum Hill Road.

Transition I Mixed is also identified as the area east of Town to Back Creek. Much of this area will be served by the new wastewater treatment system. Annexation of Sprindale Village is already planned.

Considerable residential development has been taking place in this area. This area was cited by many 1986 Bath Household Survey respondents as the

next area in which to expand wastewater treatment facilities.

It is important to maintain the residential nature of this area. Without such maintenance, strip development could occur, which has been determined undesirable by the Planning Board.

Transition II Residential is identified on the Land Classification Map as the areas on the western side of Bath Creek and the southeastern side of Back Creek. The Transition II classification does not mandate an increase in the intensity of development in these areas. These areas have been classified as Transition II because they are likely to require community services in the next ten years.

Presently, these Transition II Residential areas reflect low density residential development. This type of low density development should be encouraged. These areas are contiguous to Areas of Environmental Concern and significant archeological sites. Therefore, all future development on these lands should be carefully reviewed in light of the environmental sensitivity of the area and its historic significance.

Transition Industrial

Transition I Industrial is identified on the Land Classification Map as that area north of the planning jurisdiction. Though technically out of the Town's jurisdiction, the Town does control the development of this area. This area was deeded to the Town many years ago as the "Town Commons" and is now under construction as the site of the Town wastewater treatment facility.

Conclusion of Transition Areas

Taken together, these definitions differ from the CAMA category of "transition", in that there is enough vacant land inside the existing developed area to accommodate the probable increase of dwelling units

between now and the year 2000. Nevertheless, the Town Board has selected these areas as potential areas to be served with urban services because of their attractiveness to developers, their potential availability for sale and development, and the willingness of interest to developers in having their property annexed, and conversely, because of the reluctance on the part of those who own land inside the already developed area to sell it for residential or other uses. It is important to understand that the local zoning ordinance will specify particular uses, densities, site design, etc., and is the tool must often used to carry out the intent of the plan and policies of the Town in these areas.

Thus, the total area shown as "transition" is larger than the amount of land needed for proposed population increases which cannot be accommodated in the vacant developed areas. Nevertheless, the Town Board wanted to offer this land as modified transition as inducement for future growth and development. The size of these transition areas, plus the fact that much of it lies outside the presently incorporated area, raises concerns of cost of extending services. The Town is aware that outside extension of services to entice or support urban intensity of development is often very expensive. Thus, detailed financial feasibility studies are recommended as each outside transition area is considered for provision of services.

D. Rural

The purpose of the rural class is to provide for agricultural, forest management, mineral extractions and other low intensity uses.

In accordance with the CAMA regulations, lands in this area have high potential for agricultural use. The rural classification also includes lands with one or more limitations that would make development costly and hazardous

(particularly deep slopes and flood prone areas).

Bath has considerable potential for mineral extraction activity and there are good stands of trees in the area. Since the Planning Board (through its policy discussion) does not want to encourage mining or commercial forestation in the one-mile planning area, the rural category has been modified to provide for only desired uses within the broader "rural" category. Permissible uses in the rural classification are very low density agriculture, residential, and commercial development.

E. Conservation

The purpose of the conservation class is to provide for effective long-term management of significant limited or irreplaceable areas. This management is necessary in the Bath Planning Area along the coastal shorelines of Bath and Back Creeks [areas designated as public trust waters and coastal wetlands (marshes)].

The Town Board wishes that these waters and marshes be protected and that only the uses it stated as desirable be permitted there. Because any development, including fill and mining, will destroy such valuable areas, they are herein designated "conservation" in the strictest sense of the category. As such, no public funds, either direct or indirect, are to be used to encourage intensive development in the conservation class.

This classification does not limit all development. Any development in these areas must protect the natural barriers to erosion that shorelines provide, protect documented historic architecture or archeological resources, not cause undue sedimentation, and not cover an undue portion of the site with an impervious surface. Examples of suitable uses for conservation lands are parks and recreation areas.

VI. Analysis of Policy Achievements since 1981

New to the CAMA land use planning process this year is the requirement that all plans contain a section dedicated to examining policy achievements which have occurred since the development of the last land use plan.

The Town of Bath last prepared a land use plan during the years 1980-81. Like this current plan, the last plan was prepared utilizing grant money provided by the Division of Coastal Management of the North Carolina Department of Natural Resources and Community Development. Also like this current plan, the last plan was developed with consultant assistance provided by Planning & Design Associates, P.A. of Raleigh, North Carolina.

Policy objectives in the previous Bath Land Use Plan, categorized under the CAMA guidelines of **Resource Protection, Resource Production and Management, Economic and Community Development, Continuing Public Participation, and Other Policies** included:

Resource Protection

Safeguard and perpetuate the biological, social, economic, and aesthetic value of the community's coastal wetlands (salt marshes) and the public trust waters (of Bath and Back Creeks).

Reduce occasional coliform pollution in the community's water system.

Adequately provide water service to residents (and to potential developers).

Improve wastewater treatment in the Town, through initiating steps to install a community, land based wastewater treatment system.

Direct development with proper consideration of soils, pending completion of the detailed soils survey.

Preserve farmland in a manner which accommodates the best mix of other uses inside the town limits and inside the one-mile area.

Guide development to protect historic properties and perpetuate the historic character and atmosphere of the community.

Rid the Town of man-made hazards, especially dilapidated, vacant structures.

Reduce the rate of erosion of the shores of Bath and Back Creek, especially at Handy's Point and Bonners Point.

Resource Production and Management

Use areas designated as prime agricultural land in the most productive manner.

Equip the Town to influence the impact which phosphate mining may have upon its planning area between now and the year 2000.

Protect and insure that the waters of Bath and Back Creeks and the Pamlico River are at least of sufficient quality to promote the commercial and recreational fishing industry.

Economic and Community Development

Achieve levels, types, and patterns of economic and community development which are consistent with the historic character of the Town, raise local employment levels, and otherwise contribute to the economic base, so as to implement the Land Classification Map.

Promote location of light, non-polluting industry to employ local people.

Develop the Town's capacity to provide services to development mindful of impacts upon taxes and developers costs.

Promote development in the pattern stipulated in the 1990 Land Design Map, namely: encourage residential development near the current downtown area; concentrate institutional and cultural development so as to allow other areas to develop more intensively; concentrate agricultural and forestry uses outside the existing Town limits; undertake redevelopment of the existing Town, especially within the historic district, near the school, in the older business section, and in areas now used for agriculture or which are vacant.

Support selected state and federal programs in the Bath planning area.

Support efforts of the Coast Guard to maintain the channels of Bath and Back Creek.

Prevent the location of large energy facilities within the one-mile planning area.

Accommodate future efforts to develop private or public access to the waters of the Creeks.

Continuing Public Participation

Achieve meaningful participation in land-use related planning matters.

Other Policies

Achieve better intergovernmental coordination with respect to development policies, budgeting, implementation, particularly with Beaufort County government.

The effectiveness of the previous land use plan policy objectives is discussed in the following narrative. This discussion is categorized as the objectives were offered in the CAMA policy categories of **Resource Protection, Resource Production and Management, Economic and Community Development, Continuing Public Participation, and Other Policies.**

Resource Protection

Upon completion of the 1981 Bath Land Use Plan, the Town of Bath immediately initiated a program of grantsmanship which started the Town on the path of realizing many of its policy objectives listed under this category.

In 1982 the Town of Bath applied for and received a grant from the Division of Coastal Management's planning and management grant program with which to provide technical assistance in developing a centralized wastewater system which would be affordable for residents of the Town, many of whom are retired and live on a fixed income.

This culminated in a report titled "Planned Variations of the Proposed Wastewater Treatment System" prepared by Planning & Design Associates, P.A. This report analyzed the Town of Bath as the prototype of small, coastal communities that need wastewater treatment, yet lack the capital funding or operating revenue base for such a venture. The report examined various alternative wastewater treatment systems, made recommendations on which to pursue, and

offered financial scenarios by which the Town could develop such a system.

With grant and loan money from the NC Department of Natural Resources and Community Development, the Farmer's Home Administration, the NC General Assembly, and with local General Obligation Bonds approved by the Local Government Commission, a wastewater treatment system for the Town of Bath was

developed. Construction began in May 1986 and is expected to be completed by December 1986. Other achievements under this category include:

- An ongoing program of voluntary removal of pilings in Bath and Back Creeks. A comparison of the Hazard Areas map in the 1986 land use plan with a Hazards Area map in the 1981 land use plan will show that a significant number have been removed.
- The continued protection of the Bath Historic District by the Bath Historic District Commission.

Resource Production and Management

Policy achievements include:

- Continued protection of the water quality of Bath and Back Creeks by:
 1. Development of the wastewater system.
 2. Prohibition of the development of an additional marina adjacent to the Bath Creek Bridge.
 3. Approximately 1200 feet of commercial bulkhead has been constructed around Bonner's Point.

Economic and Community Development

Policy achievements include:

- Achieve levels, types, and patterns of economic and community growth which are consistent with the historic character of the Town
 1. Prohibition of the development of an additional marina adjacent to the Bath Creek Bridge.
- Develop the Town's capacity to provide services to development mindful of impacts upon taxes and developers costs by:
 1. Development of a wastewater treatment system. The wastewater system will allow densities high enough to generate revenues sufficient to accomodate desired development patterns. The placement of the wastewater lines will stimulate the redevelopment

and development of the older areas of town. The wastewater treatment facility eliminates the burden on local industry to furnish its own wastewater treatment.

- Encourage development that contributes to the economic base.
 1. Construction of a new restaurant which serves the local population and the tourists.

Continuing Public Participation

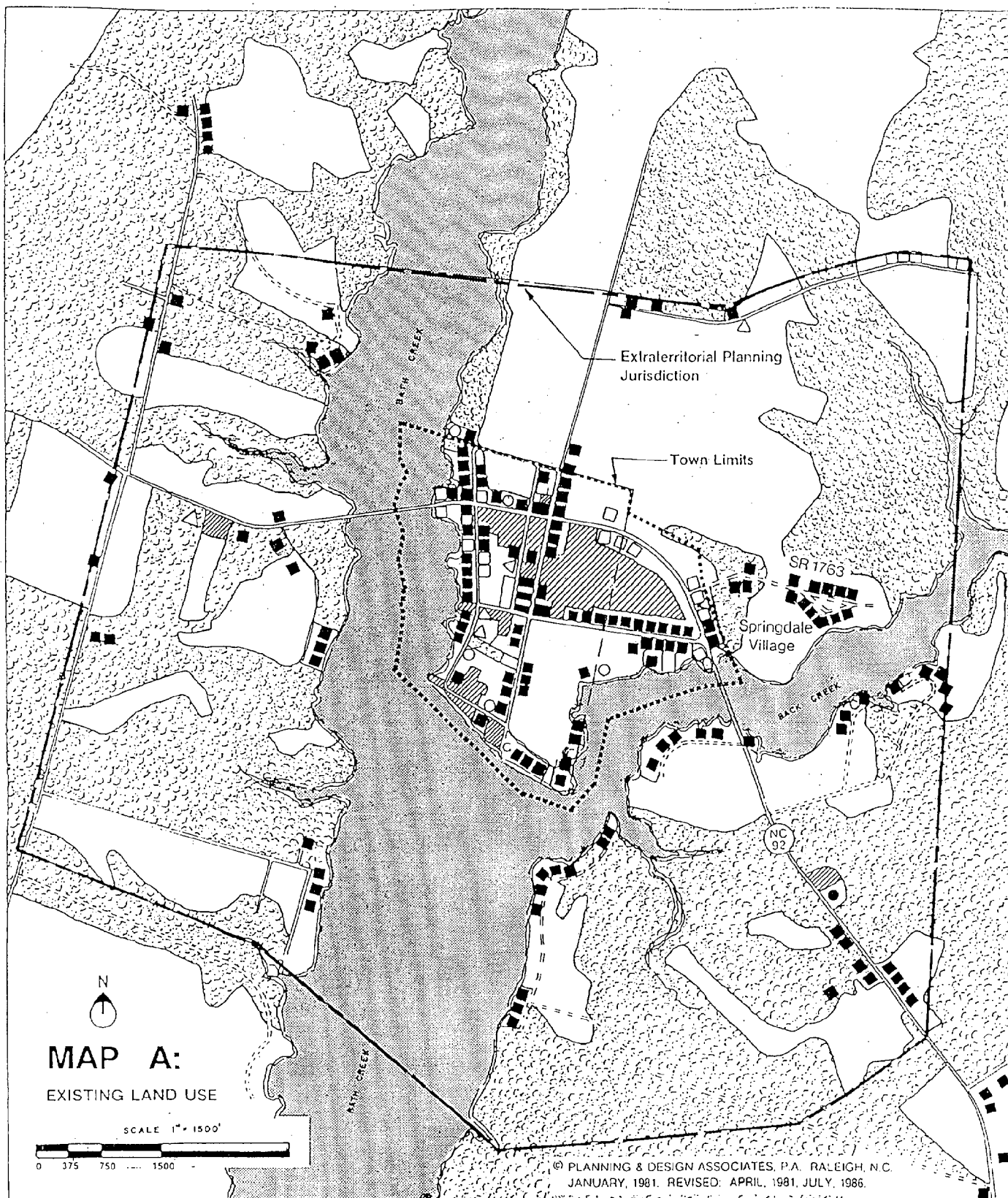
Policy achievements include:

- Achieve meaningful public participation in land-use related planning matters by:
 1. Public Participation in the 1986 Bath Land Use Plan Update. A household survey was distributed to as many of the families in the Bath Planning Area as possible. The survey questioned the Bath residents' attitudes regarding the importance of particular issues in the Bath area. The survey also questioned peoples' attitudes regarding potential types of development, as to whether particular types of development were desirable or undesirable. Approximately 60% of all Bath households responded to the survey. The results of the Bath Household Survey helped to determine not only the Policy Objectives in this Land Use Update but the results contributed to identifying the various types of development encouraged or discouraged in specific areas of the Bath Planning Area.

Disk: Bath LUP
File: LUP

MAPS

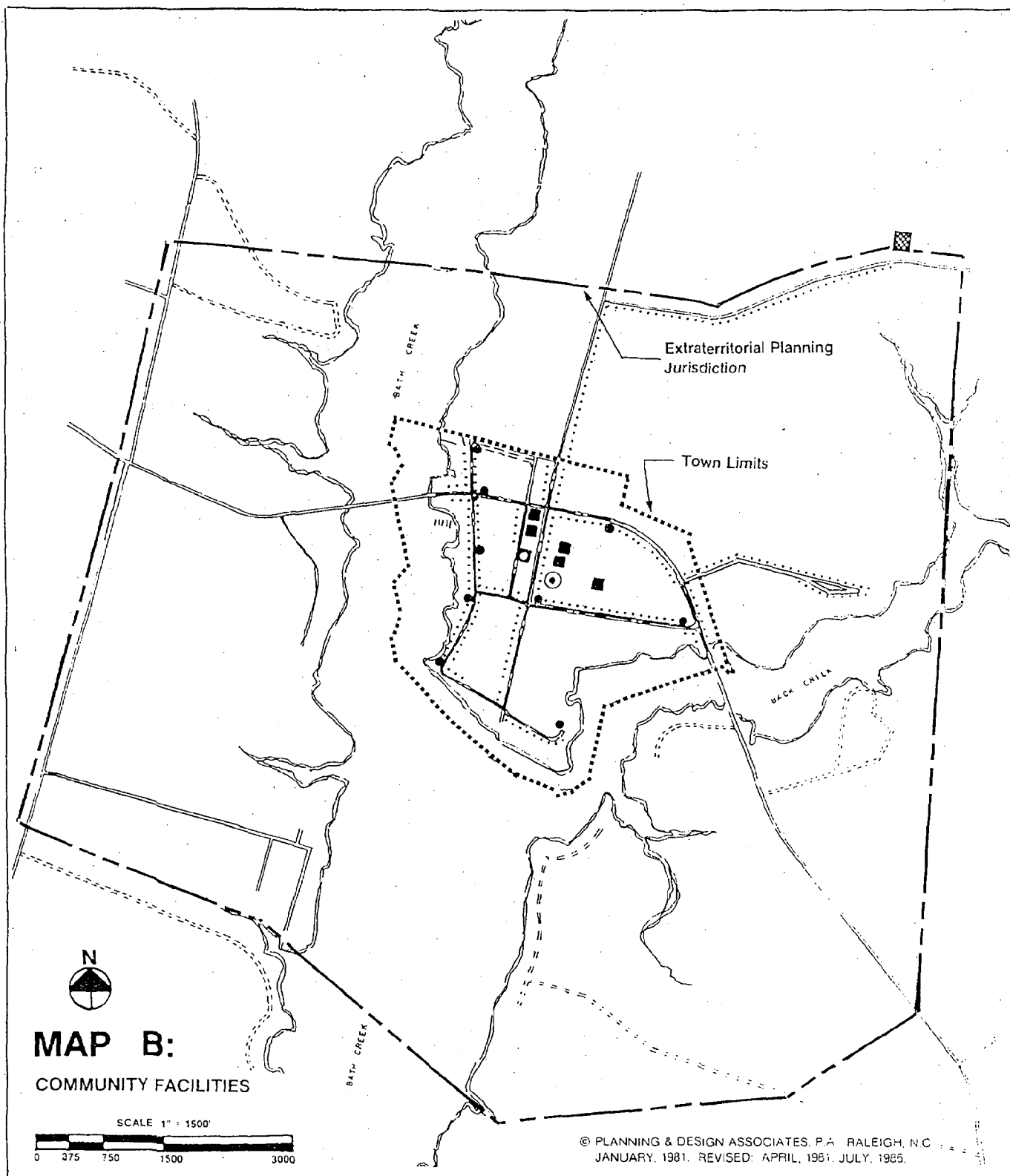
- Map A: Existing Land Use
- Map B: Community Facilities
- Map C: Historic District and Inventory of Historic Properties
- Map D: Fragile Areas Map
- Map E: Areas of Potential Septic Difficulty
- Map F: Hazard Areas
- Map G: Flood Prone Areas
- Map H: Hurricane and Flood Evacuation Routes and Shelters
- Map I: Land Classification Map



**TOWN OF
BATH**
BEAUFORT COUNTY,
NORTH CAROLINA
JANUARY, 1981

- | | | |
|---------------------------|------------------------------|---------------|
| ■ RESIDENTIAL AREA | ▨ INSTITUTIONAL (GOVERNMENT) | C CEMETARY |
| □ COMMERCIAL AREA | △ CHURCH | |
| ● INDUSTRIAL (1 LOT) | — PAVED ROAD | ▨ FORESTLAND |
| ○ CULTURAL — RECREATIONAL | - - - UNPAVED ROAD | ▨ AGRICULTURE |

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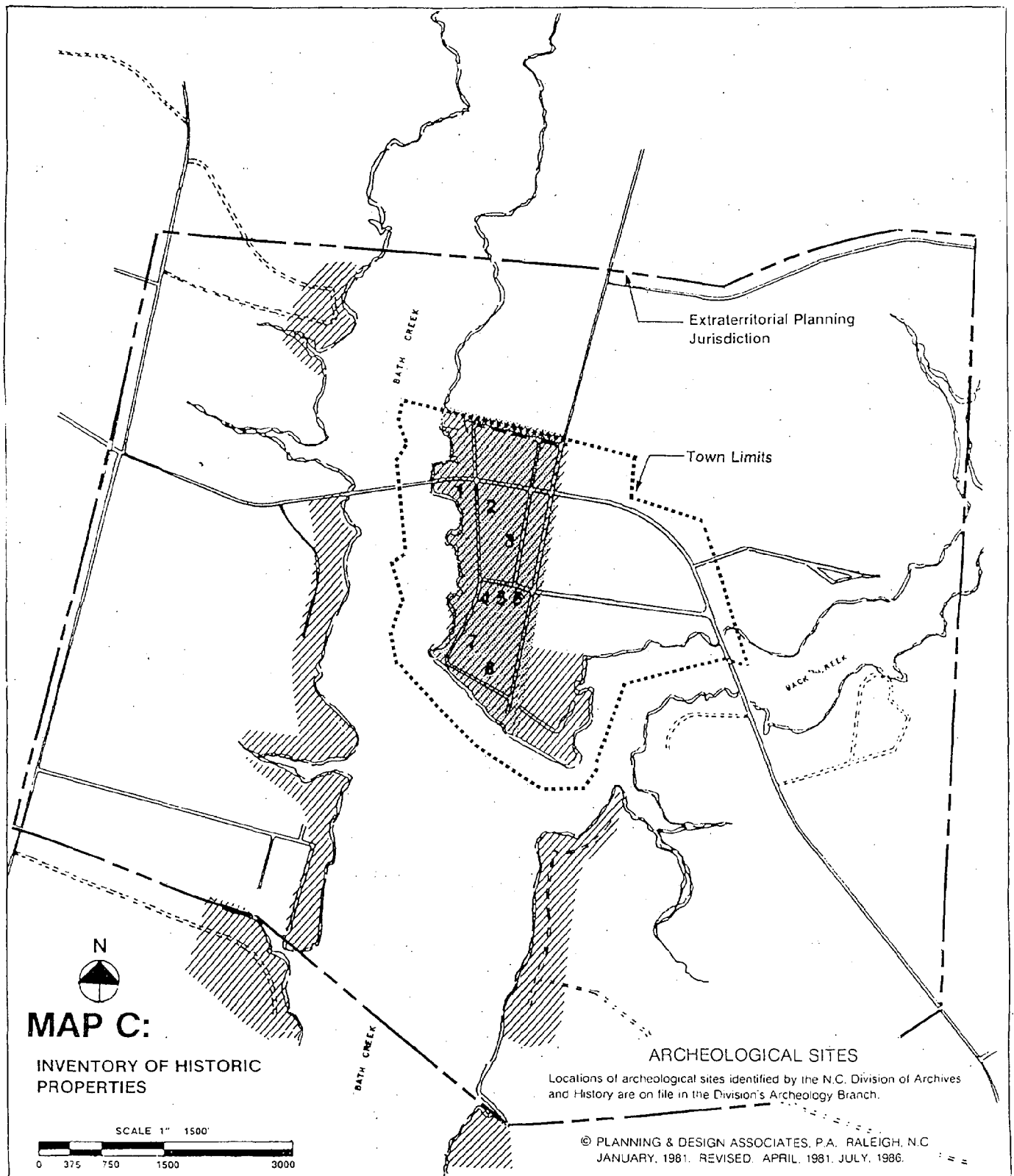
TOWN OF
BATH
BEAUFORT COUNTY,
NORTH CAROLINA
JANUARY, 1981

..... WASTE WATER LINE
○ WATER STORAGE TANK
||||| PUBLIC DOCK

== PAVED ROAD
--- UNPAVED ROAD
■ SCHOOL
□ FIRE DEPARTMENT

--- WATER LINE
● HYDRANT
■ WASTEWATER TREATMENT FACILITY

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**TOWN OF
BATH**
BEAUFORT COUNTY,
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JANUARY, 1981

ARCHEOLOGICAL SITES

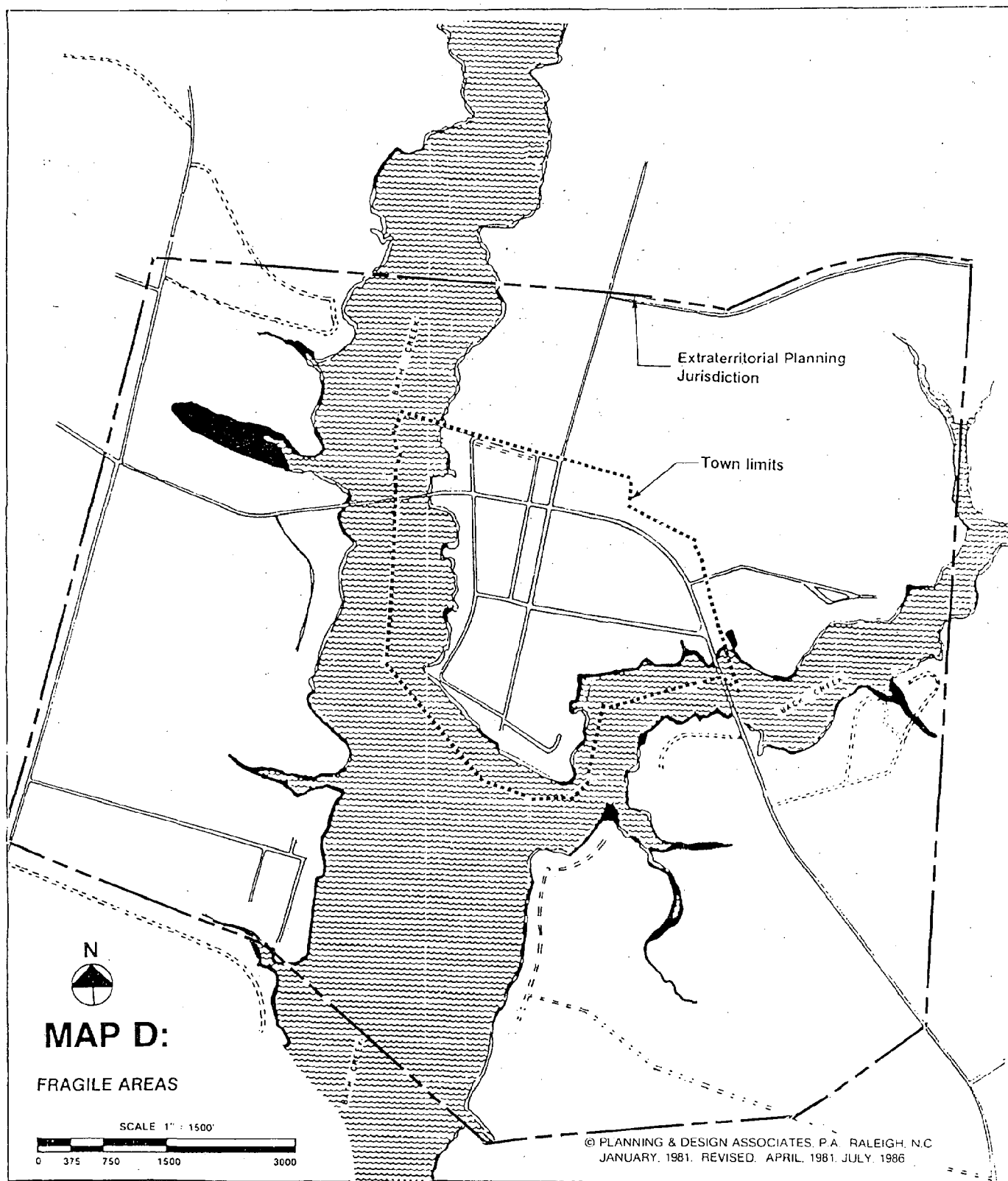
HISTORIC DISTRICT

Source: Division of Archives & History

HISTORIC STRUCTURES

- | | |
|-----------------------------|-----------------------|
| 1. Swindell's General Store | 5. St. Thomas Church |
| 2. Palmer-Marsh House | 6. New Public Library |
| 3. Van Der Veer House | 7. Carrow House |
| 4. Globe House | 8. Bonner House |

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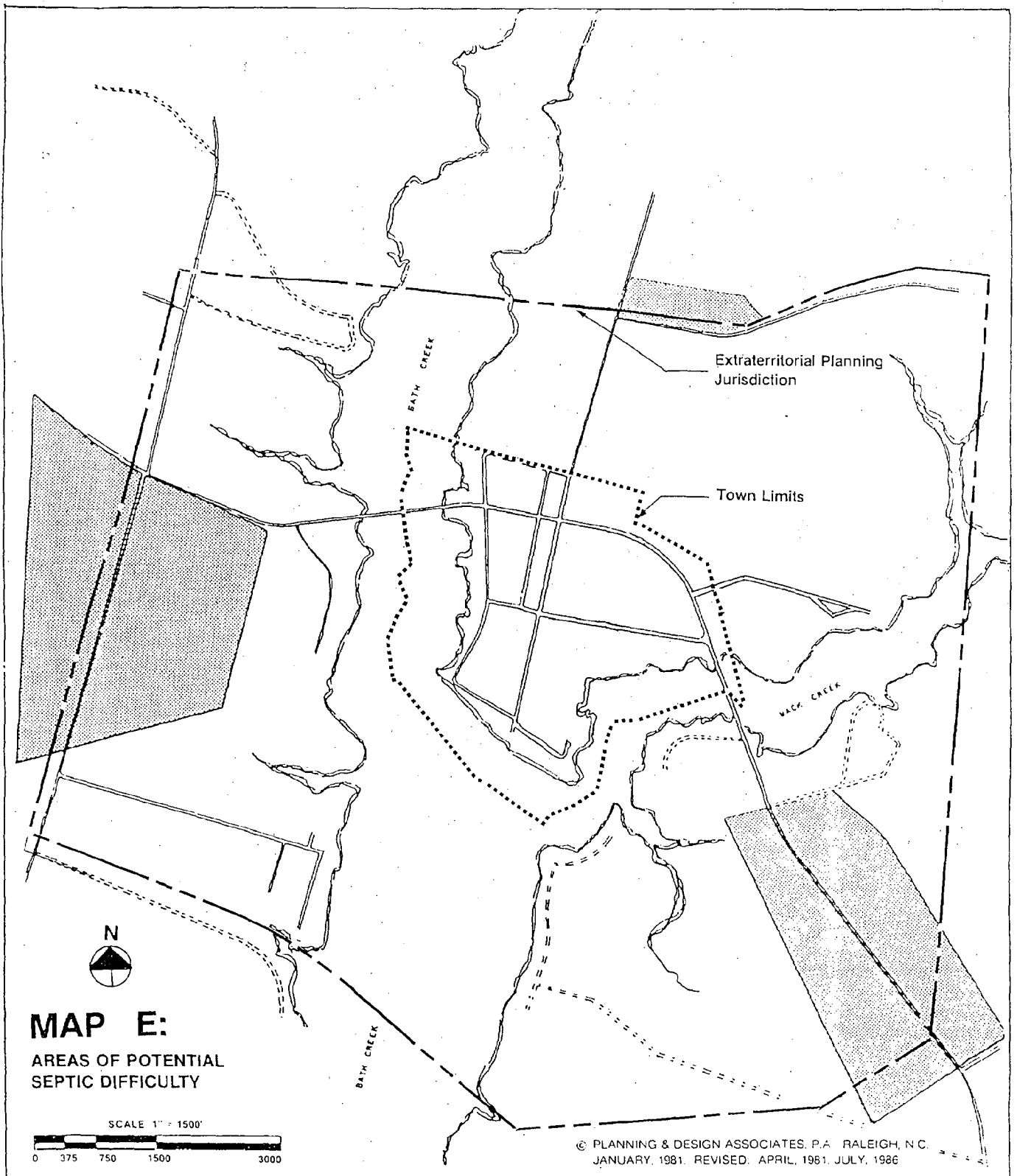


TOWN OF
BATH
BEAUFORT COUNTY,
NORTH CAROLINA
JANUARY, 1981

WETLANDS (MARSHES)

PUBLIC TRUST WATERS

NOTE: This map is intended to indicate general location of AEC's only. Actual specific location may be determined only through site inspection.

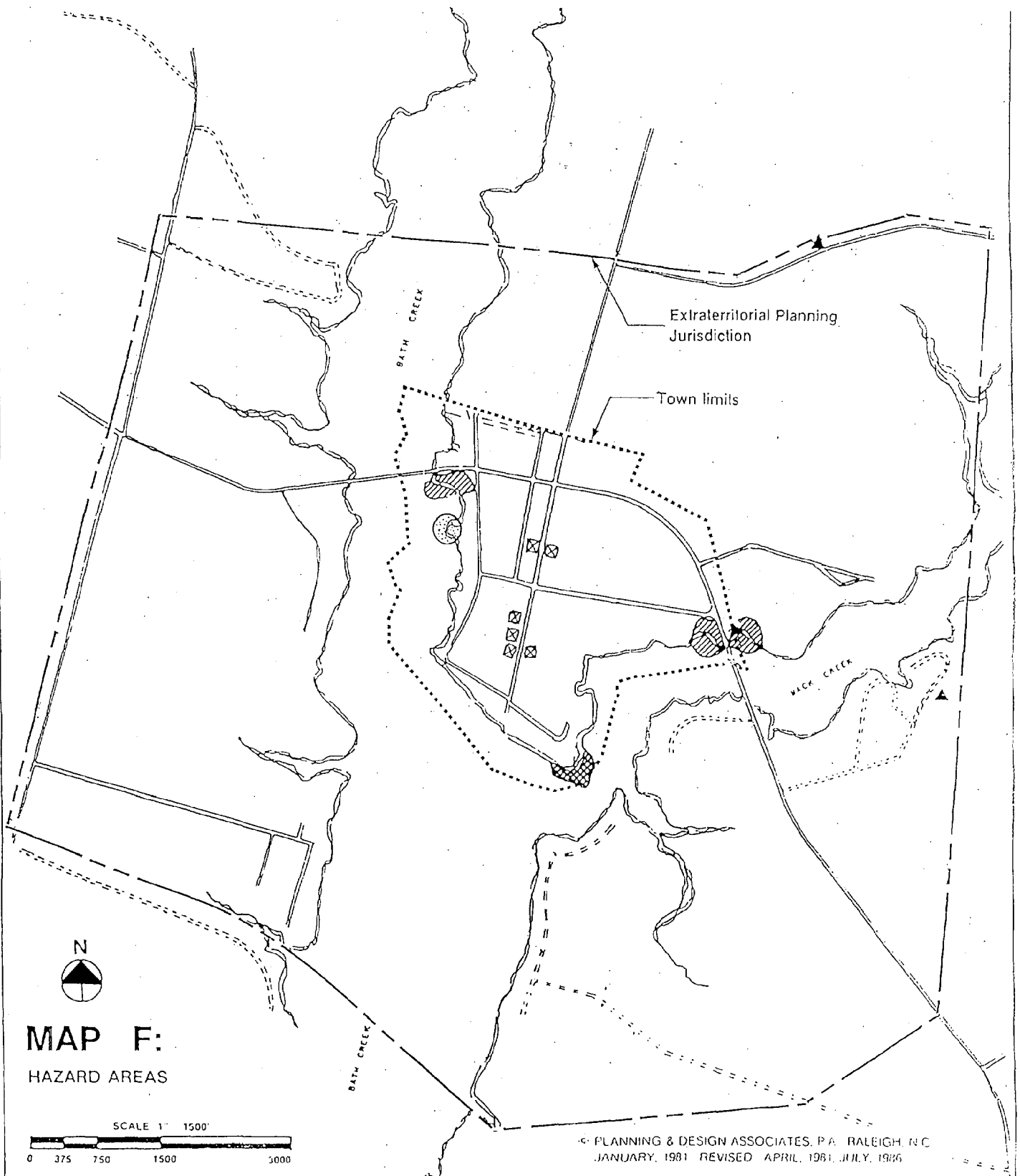


TOWN OF
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BEAUFORT COUNTY,
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JANUARY, 1981






Soil Map Prepared by Department of Agriculture, Soil Conservation Service

 HIGH WATER TABLE AND POOR DRAINAGE

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TOWN OF
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BEAUFORT COUNTY,
NORTH CAROLINA
JANUARY, 1981

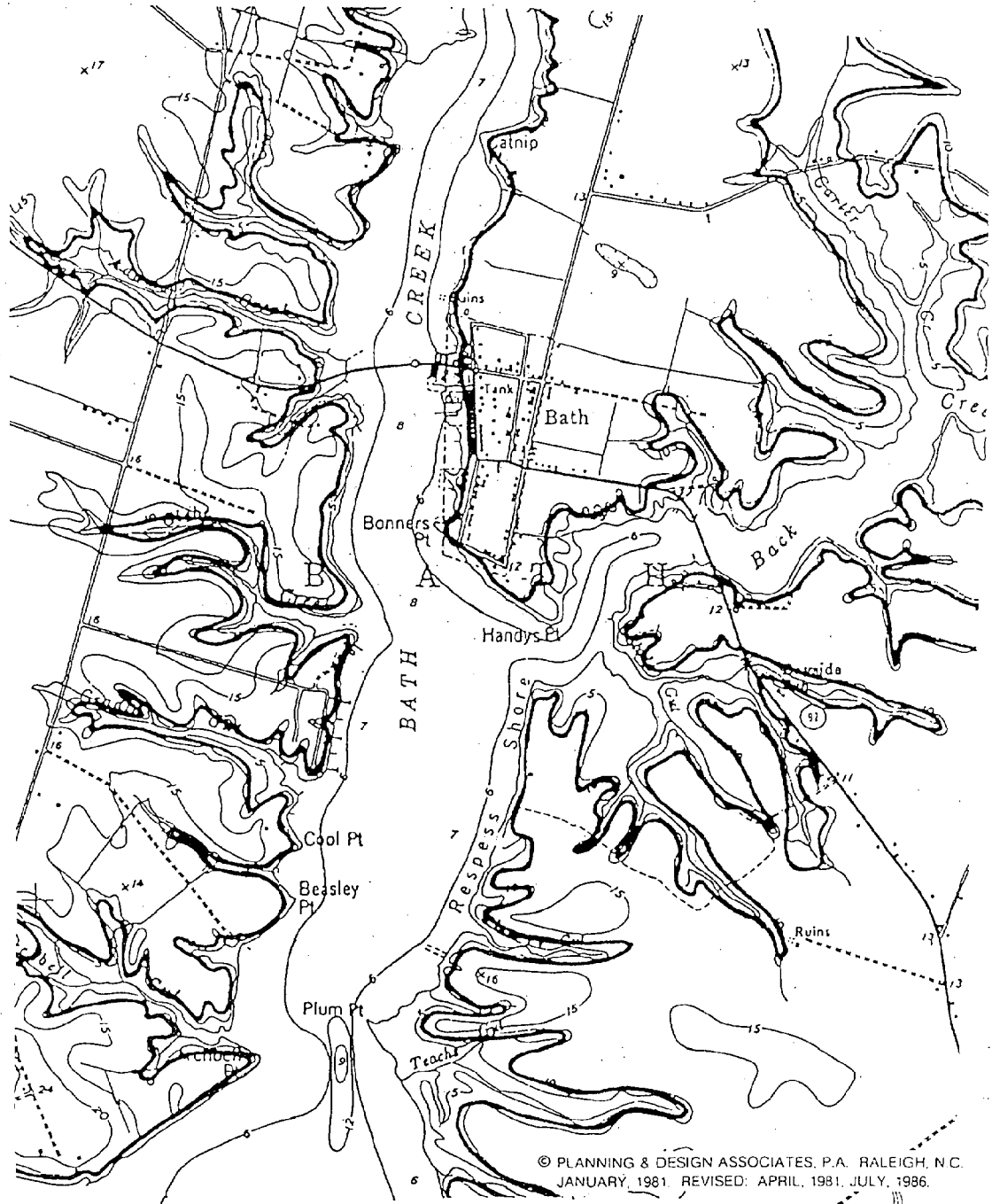
- | | | | |
|---|-----------------------|---|---------------------------|
|  | DILAPIDATED BUILDINGS |  | SHALLOW WATER, NOT BOUYED |
|  | UNAUTHORIZED DUMPING |  | FLOOD AREA |
|  | EXCESS EROSION | | |

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MAP G: FLOOD-PRONE AREAS

Base by U.S. Geological Survey
1971

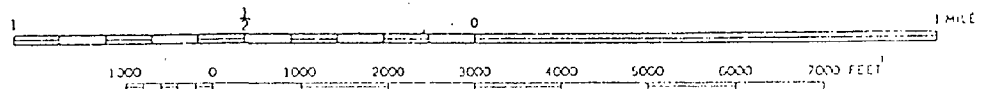
CONTOUR INTERVAL 5 FEET
DATUM IS MEAN SEA LEVEL



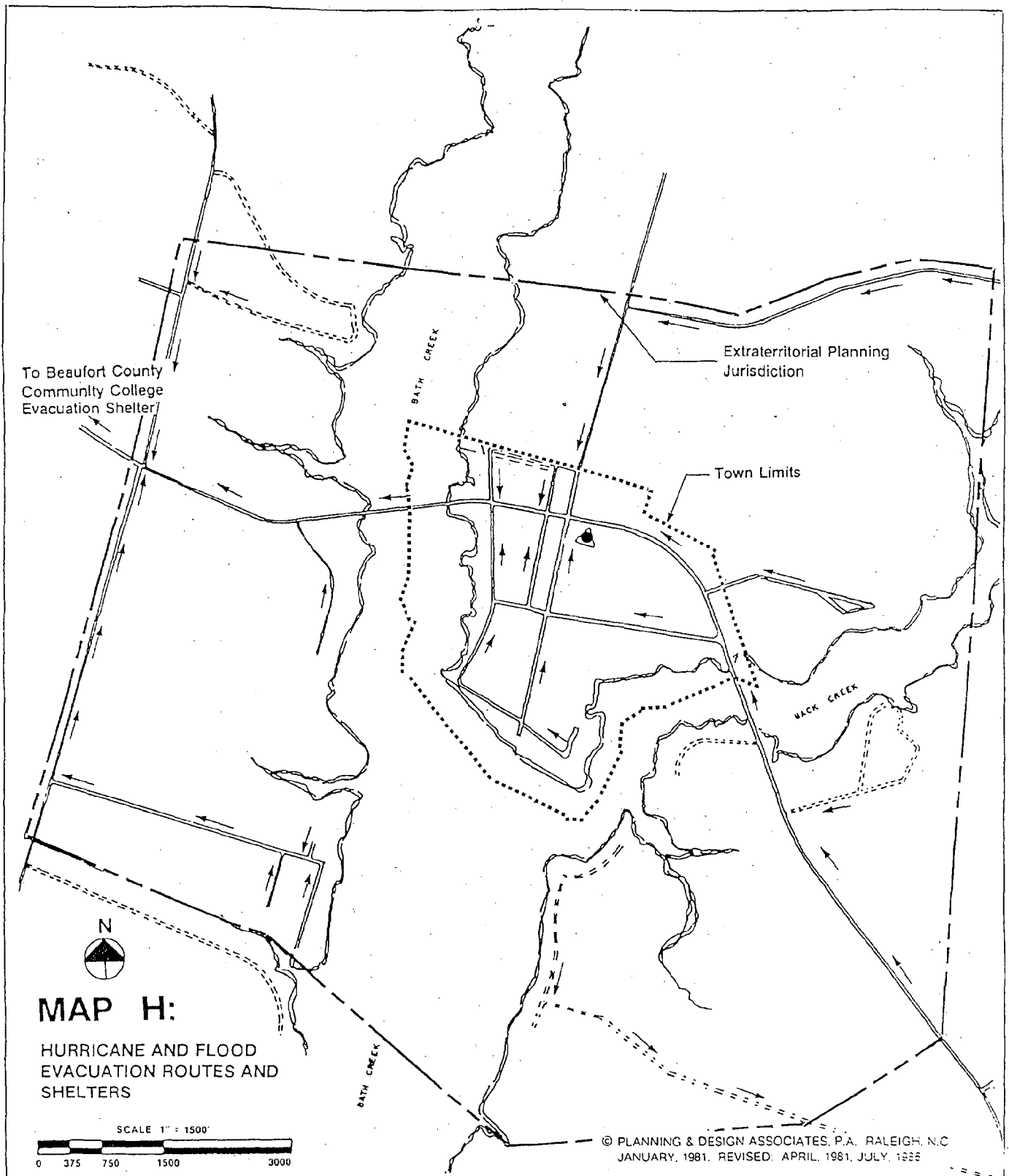
© PLANNING & DESIGN ASSOCIATES, P.A. RALEIGH, N.C.
JANUARY, 1981. REVISED: APRIL, 1981, JULY, 1986.

TOWN OF
BATH
BEAUFORT COUNTY,
NORTH CAROLINA
JANUARY, 1981

SCALE 1:24000



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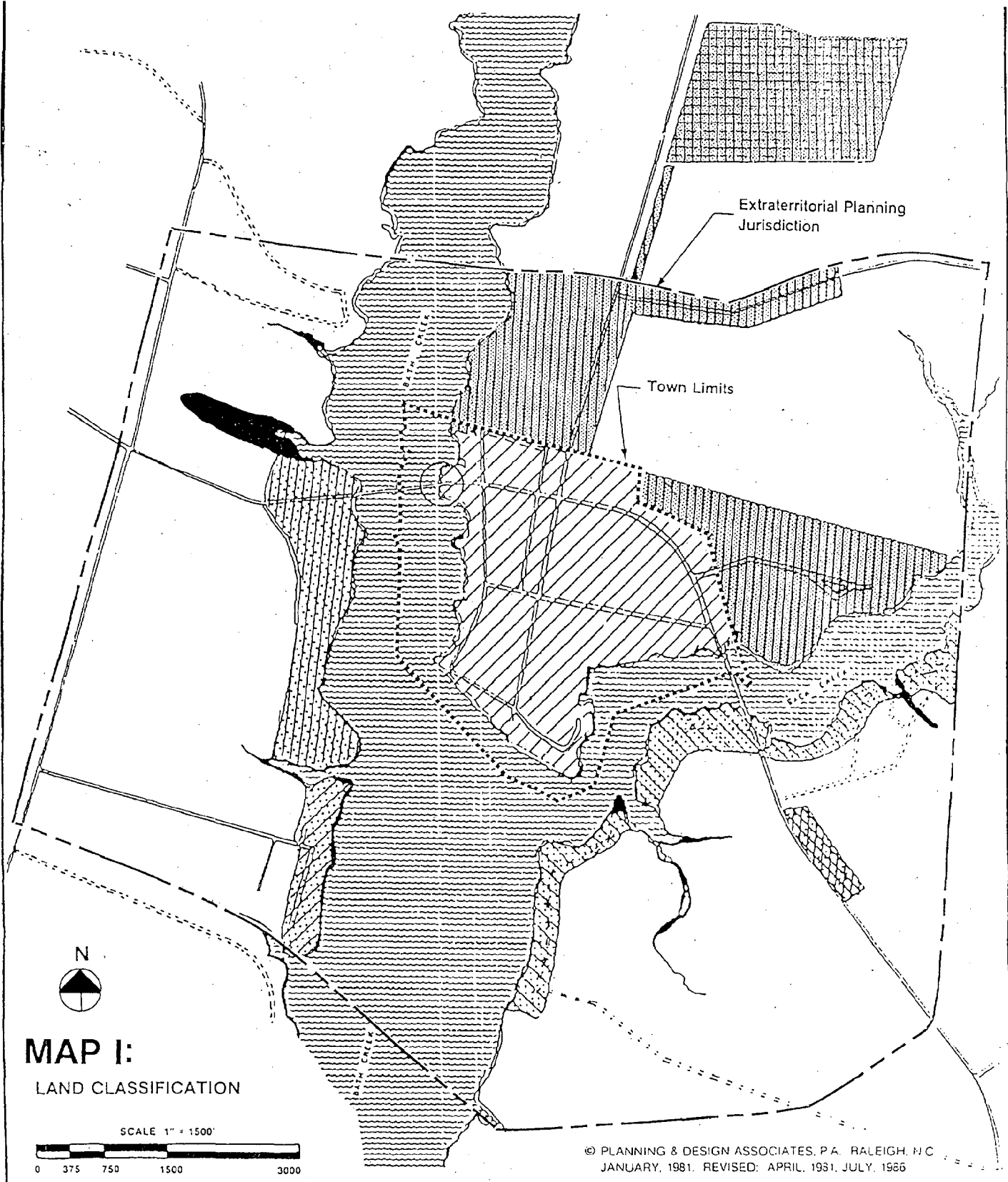


TOWN OF
BATH
BEAUFORT COUNTY,
NORTH CAROLINA
JANUARY, 1981

▲ EVACUATION SHELTER: BATH HIGH SCHOOL

← EVACUATION ROUTES

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**TOWN OF
BATH**
BEAUFORT COUNTY,
NORTH CAROLINA
JANUARY, 1981

- Developed
- Rural
- Community
- Conservation
- Water (ALL SURFACE WATER IS ALSO CONSERVATION)
- Special Development Project

- Transition I
- Transition II
- Subcategories
- Residential
- Mixed
- Industrial

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APPENDIX

- A. Town Board of Commissioners
- B. Town Planning Board
- C. 1986 Bath Household Survey
- D. Results of 1986 Bath Household Survey
- E. Prioritization of Important Issues
- F. Prioritization of Potential Development Types
- G. Survey Results/Policy Objectives Cross Reference Matrix
- H. Bibliography
- I.

Town Board of Commissioners

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Box 65
Bath, NC 27808

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Bath, NC 27808

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Washington, NC 27889

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Bath, NC 27808

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Bath, NC 27808

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P.O. Box 279
Bath, NC 27808
923-5621/office
923-5851/home

Teeny Mason
Rt. 1, Box 104-A, Main Street
Bath, NC 27808
322-4211/office
923-4571/home

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Bath, NC 27808

William R. "Bob" Lewis
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Bath, NC 27808

Willy Phillips
Main Street
Bath, NC 27808

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Carol Richardson
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Bath, NC 27808

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S. Main Street
Bath, NC 27808

Howard Tanner, Jr.
P.O. Box 208
Bath, NC 27808

Household Survey
Town of Bath, North Carolina

Please complete and return to Bubs Carson by April 2, 1986.

1. Where do you live?

Please mark with an "X" the approximate location of your house on the attached map (last page).

2. How long have you lived in Bath?

_____ 0 - 5 years
_____ 5 - 10 years
_____ 10 years or more

3. Have you ever attended a public hearing, Town Board of Commissioners meeting, or Town Planning Board meeting?

_____ Yes
_____ No

4. On pages 2 and 3 are the major issues derived from reviewing previous land use plans and recent input from Bath community leaders. Please indicate the importance of each issue using the following response categories:

"No" means not an important issue in Bath.
"Slight" means a slightly important issue in Bath.
"Moderate" means a moderately important issues in Bath.
"Serious" means a seriously important issue in Bath.

5. On page 4 is a list of potential types of development which could occur in Bath during the next 10 years. Please indicate on page 4, what types, if any, should be encouraged and the extent to which they should be encouraged.

4. IMPORTANCE OF ISSUES SURVEY

"No" means not an important issue in Bath

"Slight" means a slightly important issue in Bath

"Moderate" means a moderately important issue in Bath

"Serious" means a seriously important issue in Bath

Issue	Importance of Problem in Bath Area			
	No	Slight	Moderate	Serious
1. Quality of drinking water				
2. Pollution of creeks/rivers from industry				
3. Pollution of creeks/rivers from farmland water runoff				
4. Availability of adequate housing for elderly persons				
5. Availability of adequate housing for low-income persons				
6. Availability of adequate housing for tourism industry				
7. Garbage collection and disposal				
8. Damage to marsh areas of creeks/rivers				
9. Development of mobile homes				
10. Commercial pier/marina development				
11. Phosphate mining operations along and within Pamlico river				
12. Protection of cultural/historical areas				
13. Lack of adequate Town Hall				
14. Old/dilapidated buildings				
15. Conversion of forested lands to agricultural lands				
16. Adequacy of commercial development				
17. Septic tank failure				

IMPORTANCE OF ISSUES SURVEY (continued)

"No" means not an important issue in Bath

"Slight" means a slightly important issue in Bath

"Moderate" means a moderately important issue in Bath

"Serious" means a seriously important issue in Bath

Issue	Importance of Problem in Bath Area			
	No	Slight	Moderate	Serious
18. Need for new industry and new employers				
19. Too many pilings/stakes in creeks/rivers				
20. Excessive erosion				
21. Improper filling/dredging of waterways				
22. Coordination among government regulations regarding waterfront development				
23. Police protection				
24. Fire protection				
25. Productive uses of old structures				
26. Preservation of community-based school				
27. Access to the waterways				
28. Expansion of existing industry				
30. Mix of historic and non-historic properties				
31. Protection of commercial fishing industry				
32. Property tax evaluation				
33. Parking				
Others (please list and rank):				

5. TYPES OF DEVELOPMENT SURVEY

Please indicate what types of development, if any,
is desired, or not desired during the next ten years.

Potential Development Types	Desirability of Devel. Types		
	Undesirable	Neutral	Desirable
Protection of agriculture land			
Protection of natural resources			
Historic and cultural attractions			
Housing for elderly persons			
Housing for low-income persons			
Overnight accommodations for tourists			
Subdivision development			
Retail shops			
Restaurants			
Downtown office space for service industry			
Downtown public parking			
Light industry development			
New Town Hall			
Expansion of wastewater system			
Private marinas/boat ramps			
Public water access (powerboats & sailboats)			
Public water access (sailboats only)			
Public beach area (no boat access)			
Private recreation facilities (health club, spa, etc.)			
Public recreation facilities (park, tennis courts, etc.)			
Commercial Fishing Facilities			
Others (please list and rank):			

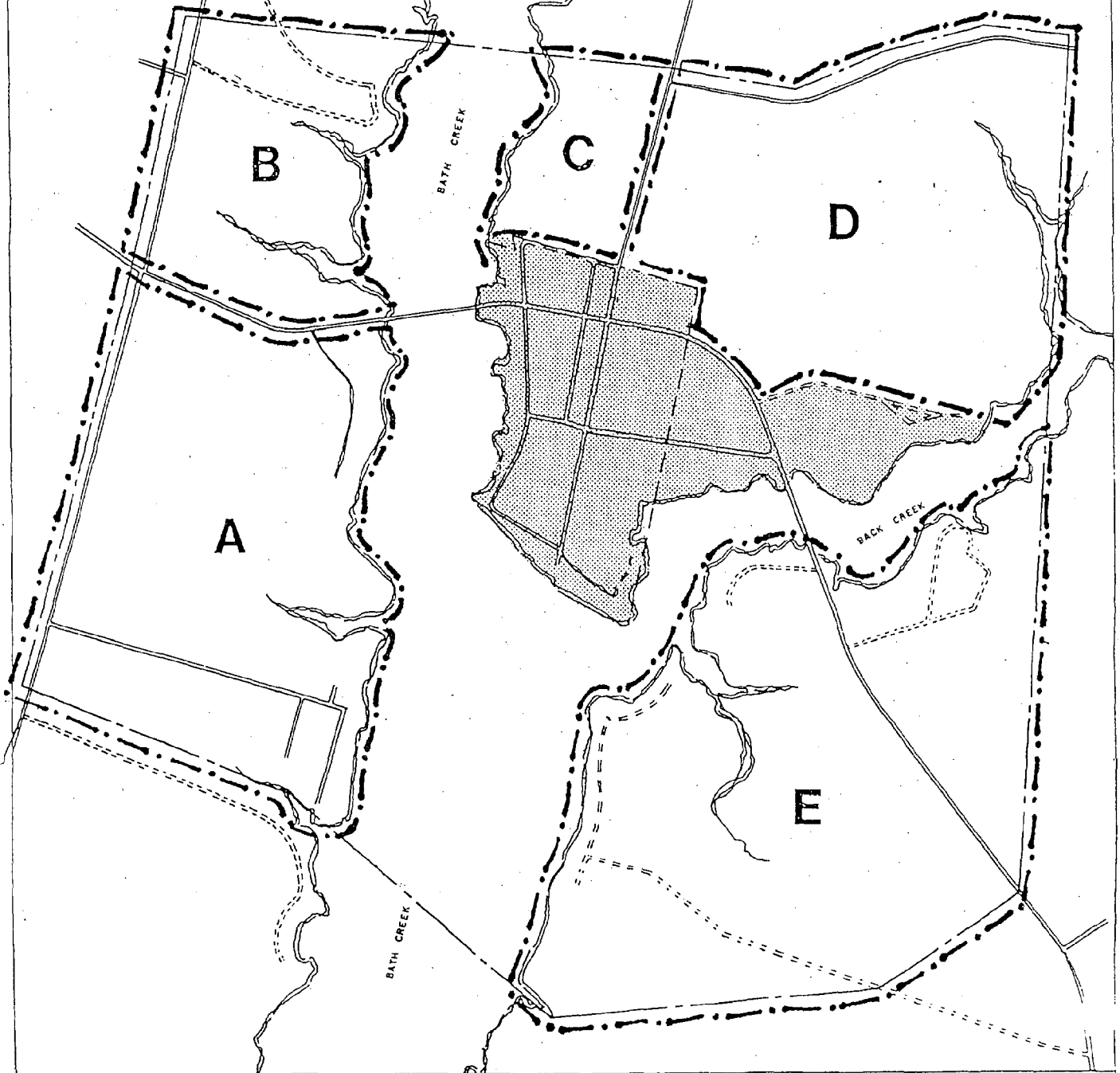
6. Refer to the map on the next page. Potential geographic areas for future expansion of the Town's wastewater system are labeled as Areas A through E. What area(s) do you think should be given top priority for future expansion of the wastewater system? Please indicate whether each area should be considered for addition to the Town's wastewater system and/or other Town Services:

- 1) Within the next 5 years
- 2) Within the next 10 years
- 3) Not at all, or after 10 years

	Add within 5 years	Add within 10 years	Add after 10 years, or not at all
Area A	_____	_____	_____
Area B	_____	_____	_____
Area C	_____	_____	_____
Area D	_____	_____	_____
Area E	_____	_____	_____

Bath LUP 1986: Survey

TOWN OF
BATH
BEAUFORT COUNTY, NORTH CAROLINA
JANUARY, 1981



SCALE 1" = 1600'

0 375 750 1500 3000



Potential Wastewater System Expansion Area Boundary



Wastewater System Service Area To Be Constructed

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Household Survey

Town of Bath, North Carolina

RESULTS (97 returned surveys)

Please complete and return to Bubs Carson by April 2, 1986.

1. Where do you live?

Please mark with an "X" the approximate location of your house on the attached map (last page).

Within Wastewater System Service Area - 47	
Region A - 14	Region C - 0
Region B - 2	Region D - 3
	Region E - 19
	No Response - 12

2. How long have you lived in Bath?

<u>27</u>	0 - 5 years
<u>12</u>	5 - 10 years
<u>58</u>	10 years or more

3. Have you ever attended a public hearing, Town Board of Commissioners meeting, or Town Planning Board meeting?

<u>68</u>	Yes
<u>29</u>	No

4. On pages 2 and 3 are the major issues derived from reviewing previous land use plans and recent input from Bath community leaders. Please indicate the importance of each issue using the following response categories:

"No" means not an important issue in Bath.
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"Serious" means a seriously important issue in Bath.

5. On page 4 is a list of potential types of development which could occur in Bath during the next 10 years. Please indicate on page 4, what types, if any, should be encouraged and the extent to which they should be encouraged.

4. IMPORTANCE OF ISSUES SURVEY

"No" means not an important issue in Bath

"Slight" means a slightly important issue in Bath

"Moderate" means a moderately important issue in Bath

"Serious" means a seriously important issue in Bath

Issue	Importance of Problem in Bath Area				No Resp.
	No	Slight	Moderate	Serious	
1. Quality of drinking water	13	11	22	47	4
2. Pollution of creeks/ivers from industry	11	7	12	61	6
3. Pollution of creeks/ivers from farmland water runoff	3	9	22	58	5
4. Availability of adequate housing for elderly persons	8	23	28	31	7
5. Availability of adequate housing for low-income persons	9	27	31	25	5
6. Availability of adequate housing for tourism industry	10	21	29	32	5
7. Garbage collection and disposal	24	17	33	21	2
8. Damage to marsh areas of creeks/ivers	8	11	27	43	8
9. Development of mobile homes	26	21	22	22	6
10. Commercial pier/marina development	14	8	17	52	6
11. Phosphate mining operations along and within Pamlico river	10	7	18	58	4
12. Protection of cultural/historical areas	7	16	27	45	2
13. Lack of adequate Town Hall	30	34	15	14	4
14. Old/dilapidated buildings	13	36	22	22	4
15. Conversion of forested lands to agricultural lands	21	31	22	18	5
16. Adequacy of commercial development	17	24	23	25	8
17. Septic tank failure	12	14	26	40	5

IMPORTANCE OF ISSUES SURVEY (continued)

"No" means not an important issue in Bath

"Slight" means a slightly important issue in Bath

"Moderate" means a moderately important issue in Bath

"Serious" means a seriously important issue in Bath

Issue	Importance of Problem in Bath Area				No Resp.
	No	Slight	Moderate	Serious	
18. Need for new industry and new employers	18	17	22	35	5
19. Too many pilings/stakes in creeks/rivers	7	14	19	50	7
20. Excessive erosion	5	12	38	37	5
21. Improper filling/dredging of waterways	19	23	23	25	7
22. Coordination among government regulations regarding waterfront development	6	16	30	39	6
23. Police protection	10	28	31	25	3
24. Fire protection	23	18	28	25	3
25. Productive uses of old structures	11	31	30	19	6
26. Preservation of community-based school	8	15	20	52	2
27. Access to the waterways	10	23	28	29	7
28. Expansion of existing industry	18	26	24	19	10
30. Mix of historic and non-historic properties	13	29	30	18	7
31. Protection of commercial fishing industry	8	9	19	54	7
32. Property tax evaluation	20	25	26	17	9
33. Parking	34	28	16	13	6
Others (please list and rank):					
Fix House in front of Mrs. Tankard				1	
Lack of Home-based health care				1	
Speed bumps needed				1	
High Density Construction				1	
Absentee Ownership of property				1	
Lack of Fishing/Swimming Pier				1	
Lack of Community Center				1	

5. TYPES OF DEVELOPMENT SURVEY

Please indicate what types of development, if any,
is desired, or not desired during the next ten years

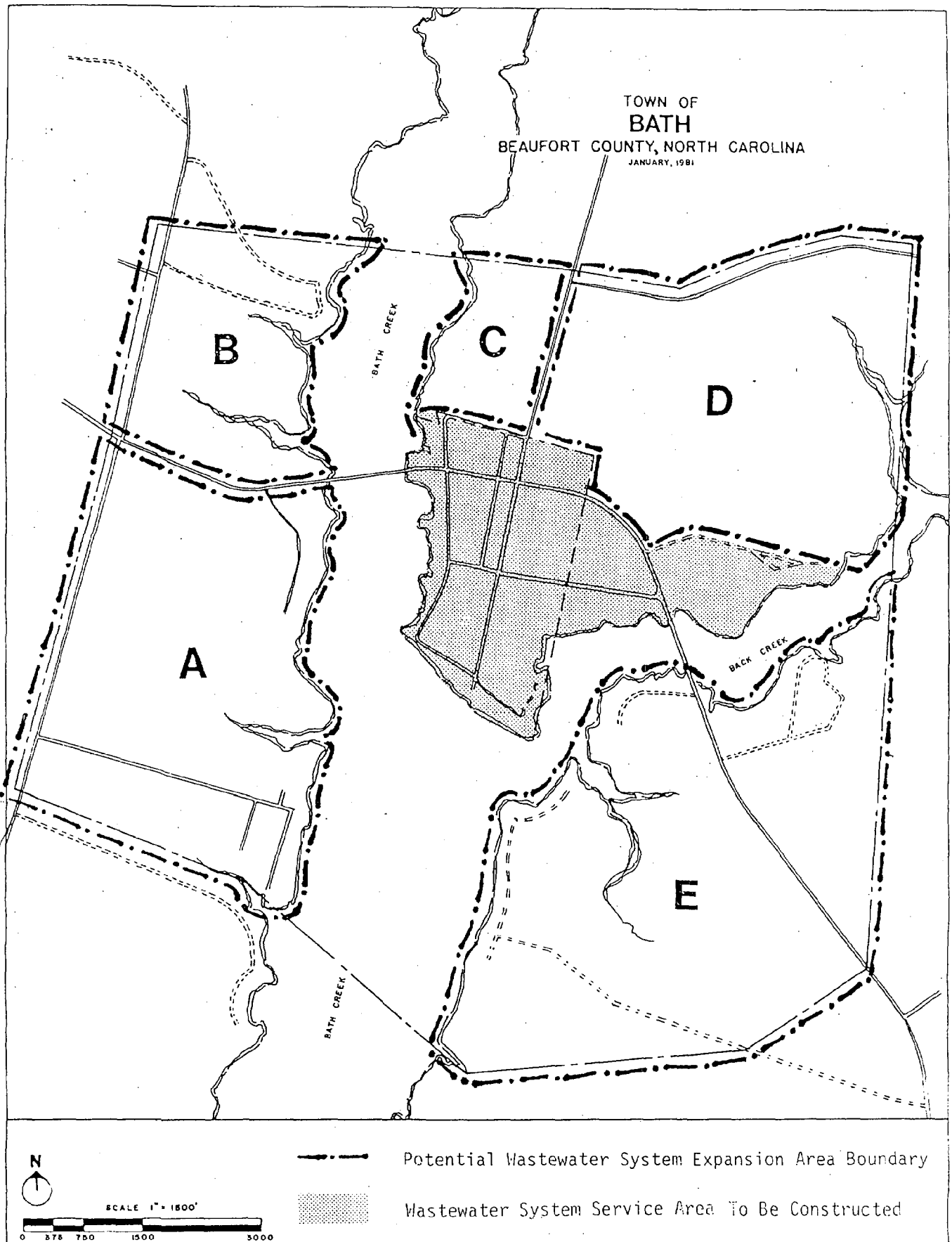
Potential Development Types	Desirability of Devel. Types			No Resp.
	Undesirable	Neutral	Desirable	
Protection of agriculture land	3	29	58	7
Protection of natural resources	0	8	83	6
Historic and cultural attractions	2	14	76	5
Housing for elderly persons	7	31	56	3
Housing for low-income persons	16	26	53	2
Overnight accommodations for tourists	12	21	61	3
Subdivision development	29	27	34	7
Retail shops	13	28	52	4
Restaurants	7	22	65	3
Downtown office space for service industry	30	37	23	7
Downtown public parking	19	46	25	7
Light industry development	20	30	37	10
New Town Hall	27	26	36	8
Expansion of wastewater system	10	22	56	9
Private marinas/boat ramps	52	20	19	6
Public water access (powerboats & sailboats)	29	28	35	5
Public water access (sailboats only)	43	33	16	5
Public beach area (no boat access)	25	23	42	7
Private recreation facilities (health club, spa, etc.)	31	33	23	10
Public recreation facilities (park, tennis courts, etc.)	30	38	22	7
Commercial Fishing Facilities	19	30	45	3
Others (please list and rank):				
Mobile home development	1			

6. Refer to the map on the next page. Potential geographic areas for future expansion of the Town's wastewater system are labeled as Areas A through E. What area(s) do you think should be given top priority for future expansion of the wastewater system? Please indicate whether each area should be considered for addition to the Town's wastewater system and/or other Town Services:

- 1) Within the next 5 years
- 2) Within the next 10 years
- 3) Not at all, or after 10 years

	Add within 5 years	Add within 10 years	Add after 10 years, or not at all	No Resp.
Area A	<u>21</u>	<u>21</u>	<u>25</u>	30
Area B	<u>20</u>	<u>20</u>	<u>28</u>	29
Area C	<u>46</u>	<u>12</u>	<u>11</u>	28
Area D	<u>31</u>	<u>23</u>	<u>15</u>	28
Area E	<u>20</u>	<u>21</u>	<u>26</u>	30

Bath LUP 1986: Survey



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Appendix E

1986 Bath Land Use Plan
May 9, 1986
Bath Household Survey Results

Rank Ordering of Issues, from Most Important to Least Important

Issues	Score*
Pollution of creeks/ivers from farmland water runoff	319
Phosphate mining operations along and within Pamlico River	310
Preservation of community-based school	306
Pollution of creeks/ivers from industry	305
Protection of cultural/historical areas	300
Protection of commercial fishing industry	299
Too many pilings/stakes in creeks/ivers	292
Excessive erosion	291
Quality of drinking water	289
Commercial pier/marina development	289
Coordination among government regulations regarding waterfront development	284
Damage to marsh areas of creeks/ivers	283
Septic tank failure	278
Availability of adequate housing for tourism industry	267
Availability of adequate housing for elderly persons	262
Police protection	259
Need for new industry and new employers	258
Availability of adequate housing for low income persons	256
Access to the waterways	256
Fire protection	243
Garbage collection and disposal	241
Productive uses of old structures	239
Old/dilapidated buildings	239
Improper filling/dredging of waterways	234
Adequacy of commercial development	234
Mix of historic and non-historic properties	233
Development of mobile homes	222
Conversion of forested lands to agricultural lands	221
Expansion of existing industry	218
Property Tax Evaluation	216
Lack of adequate Town Hall	199
Parking	190
Speed bumps needed	4
Lack of home-based health care	4
Lack of Fish/Swim Pier	4
Lack of Community Center	4
High Density Construction	4
Fix old house in front of Mrs. Tankard	4
Absentee ownership of property	4

*Scoring based on results of 1986 Bath Household Survey. The following scoring system was used for each possible response:

- 0 - No response
- 1 - Not an important issue
- 2 - A slightly important issue
- 3 - A moderately important issue
- 4 - A seriously important issue

Appendix F

1986 Bath Land Use Plan

May 9, 1986

Bath Household Survey Results

Rank Ordering of Potential Development Types, from Most Desired
to Least Desired

Potential Development Types	Score*
Protection of natural resources	265
Historic and cultural attractions	258
Restaurants	246
Overnight accommodations for tourists	237
Housing for elderly persons	237
Protection of agriculture land	235
Housing for low income persons	227
Retail shops	225
Expansion of wastewater system	222
Commercial fishing facilities	214
Public beach area (no boat access)	197
Light industry development	191
Public water access (powerboats & sailboats)	190
New Town Hall	187
Downtown public parking	186
Subdivision development	185
Downtown office space for service industry	173
Public recreation facilities	172
Private recreation facilities	166
Public water access (sailboats only)	157
Private marinas/boat ramps	149
Mobile Home Development	1

*Scoring based on results of 1986 Bath Household Survey. The following
scoring system was used for each possible response:

- 0 - No response
- 1 - Undesireable
- 2 - Neutral
- 3 - Desireable

1986 Bath Land Use Plan
May 9, 1986
Bath Household Survey Results

Rank Ordering of Issues, from Most Important to Least Important

Issues	Score*	Cross Reference
Pollution of creeks/ivers from farmland water runoff	319	I.1.f, II.1.a
Phosphate mining operations along and within Pamlico River	310	II.3
Preservation of community-based school	306	III.2
Pollution of creeks/ivers from industry	305	I.1
Protection of cultural/historical areas	300	I.4, III.6
Protection of commercial fishing industry	299	II.1, III.7
Too many pilings/stakes in creeks/ivers	292	II.4.b
Excessive erosion	291	I.6, IV.2.b
Quality of drinking water	289	I.5
Commercial pier/marina development	289	III.8, I.4.b, II.1.b
Coordination among government regulations regarding waterfront development	284	IV.3, II.6.b
Damage to marsh areas of creeks/ivers	283	I.2
Septic tank failure	278	II.4.a
Availability of adequate housing for tourism industry	267	III.1.c
Availability of adequate housing for elderly persons	262	III.3
Police protection	259	III.4.a
Need for new industry and new employers	258	III.1, III.5
Availability of adequate housing for low income persons	256	III.3
Access to the waterways	256	III.7
Fire protection	243	III.4.a
Garbage collection and disposal	241	III.4.d
Productive uses of old structures	239	III.6.d
Old/dilapidated buildings	239	III.6.c
Inproper filling/dredging of waterways	234	I.1.j
Adequacy of commercial development	234	III.6.b
Mix of historic and non-historic properties	233	I.4.b
Development of mobile homes	222	Not Addressed
Conversion of forested lands to agricultural lands	221	Not Addressed
Expansion of existing industry	218	III.1
Property Tax Evaluation	216	Not Addressed
Lack of adequate Town Hall	199	Not Addressed
Parking	190	Not Addressed
Speed bumps needed	4	Not Addressed
Lack of home-based health care	4	Not Addressed
Lack of Fish/Swim Pier	4	III.7
Lack of Community Center	4	Not Addressed
High Density Construction	4	Not Addressed
Fix old house in front of Mrs. Tankard	4	Not Addressed
Absentee ownership of property	4	Not Addressed

*Scoring based on results of 1986 Bath Household Survey. The following scoring system was used for each possible response:

- 0 - No response
- 1 - Not an important issue
- 2 - A slightly important issue
- 3 - A moderately important issue
- 4 - A seriously important issue

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Major Federal Water Quality Legislation

The Clean Water Act (formally entitled the Federal Water Pollution Control Act Amendments of 1972, PL 92-500 now PL 95-217)

The primary goal of this act was the elimination of pollution discharges into navigable waters by 1985. The five major sources of pollution considered under the act in relation to this goal are as follows:

- Municipal Pollution -- To be controlled by construction of municipal sewage treatment plants (using federal grants), setting discharge requirements for the plants, and controls on other sources of municipal pollution.
- Industrial Pollution -- To be controlled by discharge requirements for industrial sources of pollution, special controls for toxics, and measures aimed at preventing and cleaning up toxic spills. Municipal and industrial discharge limitations are enforced through a system of individual permits.
- Nonpoint Source Pollution -- To be controlled primarily by state and local authorities by using various methods to minimize pollution from agriculture and urban runoff. Developing means for controlling nonpoint source pollution is one of the major objectives of the act's planning process.
- Dredge and Fill Activities -- To be controlled by a regulatory program jointly administered by the Environmental Protection Agency and the U.S. Army Corps of Engineers. This program is partially aimed at the protection of the aesthetics and ecological value of streams, lakes, estuaries, and wetlands threatened by dredging and fill activities.
- Boat Discharges -- To be controlled by federal statutes and regulations that require the use of marine sanitation devices designed to meet federal criteria and which prohibit the discharge of untreated waste into waters.

The Safe Drinking Water Act of 1974, amended in 1977 (PL 93-523)

This law authorizes the Environmental Protection Agency to regulate the quality of public drinking water by setting minimum water quality standards and prescribing treatment techniques. It allows the EPA to set limits for specific

contaminants that may adversely affect public health. States developing qualified programs may apply to the EPA for delegation to enforce the water quality standards within their state. North Carolina is currently administering the state's program through the Division of Health Services.

Toxic Substances Control Act of 1976 (PL 94-469)

This law authorizes the Environmental Protection Agency to regulate the manufacture, distribution, and use of chemical substances. It requires premarket testing of new chemicals, and identification and testing of all existing chemicals. If a substance should pose an unreasonable risk to human health or the environment, the EPA may modify, limit, or ban the manufacture, processing, distribution, and disposal of that substance. Pesticides, tobacco, firearms, nuclear materials, food, drugs, and additives are covered under separate laws.

Federal Insecticide, Fungicide and Rodenticide Act of 1947 (PL 75-717)

This act directs the Environmental Protection Agency to regulate the manufacture, distribution, and use of pesticides. All pesticides are registered and classified under this act. The EPA requires analysis of composition, degradability, use patterns, and chemical and physical properties before registering any pesticide. A pesticide shown to cause adverse environmental effects may be banned or given a restricted use classification.

Resource Conservation and Recovery Act of 1976 (PL 94-580) (Amended and reauthorized in 1984)

This law calls for "cradle to grave" regulation of hazardous wastes by the Environmental Protection Agency. It bans open dumping and the dumping of hazardous wastes in sanitary landfills. It requires development criteria to identify hazardous wastes and standards for companies generating, transporting, or disposing of such wastes. The state of North Carolina has received approval from the EPA to administer the provisions of this act. Contact: Solid and Hazardous Waste Management Branch-DHR, 919/733-2178.

Comprehensive Environmental Response, Compensation and Liability Act of 1980 (PL 96-510)

This act, better known as Superfund, is administered by the Environmental Protection Agency and addresses the problems of emergency response to toxic contamination, cleanup of abandoned sites, and the long-term care of closed hazardous waste sites. The act covers hazardous waste as defined in the Resource Conservation and Recovery Act and

hazardous or toxic substances defined by laws such as the Clean Air Act and the Clean Water Act. This law does not cover gasoline or oil and petroleum products.

Clean Air Act of 1970 (PL 91-604 and PL 95-95)

This law, administered by the Environmental Protection Agency, establishes air quality standards and regulates the emission of air pollutants such as carbon monoxide, lead, hydrocarbons, and the like. The act is important to water quality because many of the regulated pollutants combine with atmospheric water and fall to the earth with rain.

National Environmental Policy Act

The basic goal of this act is to require federal agencies to consider the potential effects of federal projects on the environment. The act requires an environmental impact statement as part of any recommendation for major federal action that may significantly affect the environment. This assessment includes any unavoidable adverse environmental impacts the project would have; alternatives to the proposed action; the short-term uses of the human environment in comparison with the maintenance and enhancement of long-term productivity; and any irreversible and irretrievable commitments of resources that would be involved if the proposal were implemented.

Coastal Zone Management Act (PL 92-583)

This act provides funds to states to develop coastal resource management programs. The law also provides matching grants to states for acquisition of lands for estuarine or marine sanctuaries.

Rural Clean Water Program

Administered by the U.S. Soil Conservation Service, this program encourages best management practices for rural landowners.

Other Federal Laws Affecting Water Quality

The Rivers and Harbors Act of 1899
Surface Mining Control and Reclamation Act of 1977
Offshore Oil Spill Prevention Fund
Deepwater Ports Act
Federal Aid to Wildlife Restoration Act
The Endangered Species Act of 1972
Rural Development Act
Water Bank Act of 1970
Fish and Wildlife Coordination Act
Water Resources Research Act

Major State Water Quality Legislation

The Mining Act of 1971
G.S. 74-46 et seq.

This law requires the consideration of water quality in mining activities, and that a permit be obtained for such activities. Overall, mining must not adversely affect wildlife, fresh water, estuarine or marine fisheries, violate state standards for surface or groundwater quality, or result in substantial deposits of sediments in streambeds or lakes or cause acid water pollution. The state Mining Commission is established by this act and authorized to adopt rules and regulations. Contact: Division of Land Resources-DNRCD, 919/733-3833.

The North Carolina Well Construction Act
G.S. 87-83 et seq.

This law applies to wells withdrawing at least 100,000 gallons of water per day. It requires that wells be constructed so that groundwater contamination is prevented. The Environmental Management Commission has the authority to adopt rules and regulations. Contact: Division of Environmental Management-DNRCD, 919/733-7015.

Certification of Wastewater Treatment Plant Operators
G.S. 90A-35 et seq.

The purpose of this law is to protect the quality of the state's water resources and to maintain the quality of receiving streams. The Environmental Management Commission is authorized to classify waste treatment facilities, require operator certificates, and monitor their operation. Contact: Division of Environmental Management-DNRCD, 919/733-7015.

Permits to Dredge and/or Fill in or about Estuarine Waters
or State Owned Lakes
G.S. 113-229

Under this law permits are issued for dredging and filling activities. Permit applications will be denied if the proposed activity is found to have a significant adverse effect on the use of the waters by the public; the value and enjoyment of riparian property owners; the public's health, safety, and welfare; the quality of public or private water supplies; and wildlife, fresh water, estuarine or marine fisheries. The Coastal Resources Commission hears permit appeals. Contact: Division of Coastal Management-DNRCD, 919/733-2293.

State Environmental Policy Act
G.S. 113A-1 et seq.

The purpose of this law is to encourage the wise, productive, and beneficial use of the state's natural resources without damage to the environment. The act also encourages an educational program to create public awareness of environmental programs and requires state organizations to consider and report on environmental aspects and consequences of their actions involving expenditures of public money. Contact: Department of Administration, 919/733-7232.

Sedimentation Pollution Control Act of 1973
G.S. 113A-50 et seq.

This act recognizes sedimentation as a major pollutant of state waters. The act establishes the Sedimentation Control Commission and authorizes it to adopt necessary rules and regulations and implement a state program for erosion and sedimentation control. The act also requires that erosion and sedimentation control plans be submitted for activities that would disturb more than one acre of land. Contact: Division of Land Resources-DNRCD, 919/733-3833.

The Coastal Area Management Act of 1974
G.S. 113A-100 et seq.

This act establishes the Coastal Resources Commission which sets policies and standards for the North Carolina Coastal Management Program. The Division of Coastal Management issues permits for development in the four areas of environmental concern within the twenty coastal counties under the authority of the commission. The commission sets construction standards and guidelines to follow in determining whether or not a permit will be approved for

development within the areas of environmental concern, including the estuarine system AEC.

Protection of water quality is one of the basic goals of the act and the commission's standards clearly state that development that would damage coastal waters will not be allowed. Although water quality can be managed to some extent through the permitting process, there are several activities that the coastal program does not have the authority to regulate, principally agriculture and forestry. Local governments, however, do have the authority to guide activities outside the designated areas of environmental concern -- land use planning and zoning are two of the primary methods for doing so. Contact: Division of Coastal Management-DNRCD, 919/733-2293.

Watershed Improvement Programs
G.S. 1309-16 et seq.

This law sets out procedures to be followed in connection with watershed improvements or drainage projects that involve channelization. The Environmental Management Commission is responsible for carrying out the provisions of this act. Contact: Division of Environmental Management-DNRCD, 919/733-7015.

Department of Natural Resources and Community Development,
Organization and Powers Generally Related to the Control of
Pollution
G.S. 143B-282 et seq.

This statute defines the powers of the Environmental Management Commission. Among other authorities, the commission can classify waters, adopt water use standards, require water use permits, and require pollution abatement and control measures. Contact: Division of Environmental Management-DNRCD, 919/733-7015.

Regulation of Use of Water Resources
G.S. 143-211 et seq.

The purpose of this statute is to conserve water resources and to maintain conditions that are conducive to the development and use of water resources. Under this act the Environmental Management Commission is authorized to designate "capacity use areas" where it is found that the use of groundwater or surface water or both requires coordination and regulation for the protection of the public interest. Contact: Division of Environmental Management-DNRCD, 919/733-7015.

dump, incinerate, or otherwise dispose of these substances in water or land unless it is done in accordance with a federal or state law, regulation, or permit. The Department of Crime Control and Public Safety is responsible for coordinating state agencies' initial response to critical toxic substance incidents. Contact: Department of Crime Control and Public Safety, 919/733-2126.

Solid Waste Management Act OF 1978
G.S. 130-Act 13B, 143B-142(b), 130A-294, and 130-166.30

This act establishes the Solid and Hazardous Waste Management Branch within the Department of Human Resources as the single agency responsible for implementing all state and federal legislation on solid and hazardous waste management. The department is directed to engage in research, conduct investigations and surveys, make inspections, and establish a statewide solid waste management program. Authority is given to the Commission for Health Services to develop rules for the establishment, location, operation, maintenance, use, and discontinuance of solid waste management sites and facilities. Contact: Solid and Hazardous Waste Management Branch-DHR, 919/733-2178.

Other State Laws Affecting Water Quality

Federal Water Resources Development Projects
G.S. 143-215.38 et seq.

Right of Withdrawal of Impounded Waters
G.S. 143-215.44 et seq.

Floodway Regulations
G.S. 143-215.51 et seq.

Grants for Water Resources Development Projects
G.S. 143-215.70 et seq.

Regional Water Supply Planning Act of 1971
G.S. 162A-20 et seq.

Regional Sewage Disposal Planning Act of 1971
G.S. 162A-26 et seq.

Metropolitan Sewerage Districts
G.S. 162A-64 et seq.

Waste Management Act of 1981
G.S. 130A-290 et seq.

Hazardous Waste Treatment Commission Act of 1984
G.S. 143B-470 et seq.

Water and Air Quality Reporting Act of 1971
G.S. 143-215.63 et seq.

This statute authorizes the Environmental Management Commission to require all persons receiving a permit from the Division of Environmental Management to file reports covering the discharge of wastes in state waters and to establish and maintain approved systems for monitoring the quality and quantity of such discharges into the water. Contact: Division of Environmental Management-DNRCD, 919/733-7015.

Oil Pollution and Hazardous Substances Control Act of 1978
G.S. 143-215.75 et seq.

The purpose of this law is to protect the public's health, safety, and welfare by protecting land and water from pollution by oil, oil products, oil by-products, and other hazardous substances. This law authorizes the Environmental Management Commission to regulate oil discharges, oil terminal facilities, and oil refining facilities. Contact: Division of Environmental Management-DNRCD, 919/733-7015.

Water Use Act
G.S. 143-215 et seq.

This law charges the Environmental Management Commission with the responsibility of carrying out a program of planning and education concerning the most beneficial long-term use and conservation of the state's water resources. Contact: Division of Environmental Management-DNRCD, 919/733-7015.

North Carolina Pesticide Law of 1971
G.S. 143-Act 52 and 143-441

This law authorizes the Department of Agriculture to appoint a Pesticide Board that can adopt rules and make policies for programs to regulate the use, application, sale, disposal, and registration of pesticides. Water quality is a consideration of disposal regulations. Contact: Food and Drug Protection Division-DOA, 919/733-7366.

Toxic Substances Act OF 1979
G.S. 143-476(d)

This act controls the disposal of specific toxic substances: mercury, plutonium, selenium, thallium, and uranium, PCBs, and kepone. This act makes it a felony to

